



National Hispanic Medical Association

Florida Chapter

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Research Competition Abstracts

NHMA Florida Chapter Inaugural Annual Meeting

Saturday, October 10, 2026

University of Miami, Lakeside Village Expo Center, Coral Gables, Florida



Research Competition Abstracts

NHMA Florida Chapter Inaugural Annual Meeting · October 10, 2026 · University of Miami, Lakeside Village Expo Center, Coral Gables, Florida

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Serguei Castañeda, MD (Co-Chair)

Graciela Luna, MD

Ivonne de la Hoz, MD

Daniela Carralero, MD

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Welcome

On October 10, 2026, the NHMA Florida Chapter gathered physicians, trainees and students at the University of Miami for its inaugural annual meeting. The day closed with the Research Competition: posters and oral presentations — case reports, original research, reviews, quality improvement and public health projects — shared with colleagues, mentors and judges.

Each of these abstracts reflects hours of work on top of demanding training and study schedules, and many tell the story of a patient whose care taught us something. Together they speak to our chapter's mission of mentorship, education and advocacy for Hispanic communities and the clinicians who serve them. Congratulations to every presenter, co-author and mentor, and thank you to the volunteer judges who made the competition possible.

The Conference Planning Committee

NHMA Florida Chapter

About the Research Competition

Medical students, residents and fellows, and international medical graduates submitted structured abstracts: case reports, original research, reviews, quality improvement and public health projects. Each abstract was scored independently by two volunteer physician judges using a published rubric, blinded to authors and institutions, with same-institution conflicts excluded. Scores were adjusted for each judge's scoring tendency before ranking. The highest-scoring abstracts overall were presented orally; best-poster awards (best case report and best research abstract) were given to medical students, residents and fellows, and international medical graduates. A presenter giving an oral presentation was not also eligible for a poster award.

About this book

Abstracts appear in the order oral presentations, then posters by category (medical students; residents and fellows; international medical graduates) and type, and are numbered sequentially. Presenting authors are underlined. Institutions are those reported by the submitting author. Searchable online versions of every abstract are published on the chapter's abstracts website.

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Oral presentation	002 · Effect of Interleukin-6 Pathway Inhibition on Apolipoprotein A1 and Apolipoprotein B: A Meta-Analysis Ermilo Echeverria-Ortegon , Alfredo Perez Tagle Tejeda, Juan Pastor-Cervantes · Memorial Healthcare System
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Oral presentation	004 · Takayasu Arteritis Unmasked During Device Infection Evaluation in Non-Ischemic Cardiomyopathy Alfredo Perez Tagle Tejeda , Ermilo Echeverria-Ortegon, Qianlan Xi, Iani Patsias, Juan Pastor-Cervantes, Fergie J. Losiniecki · Memorial Healthcare System
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Best Research Abstract · Residents & Fellows	047 · Acid Suppression Use Among Hispanic Adults Without Documented Reflux Disease Mateo Useche , Maria Alejandra Molina Rodriguez , Sharon Lechtig-Wasserman, Nazareth Jaramillo-Correa, Prashanth V. Kumar · Desert Valley Hospital

Best Case Report · International Medical Graduates	054 · An Incidental Situs Inversus Totalis in a Pediatric Case of Granulomatous Panuveitis: A Case Report Carlos Eduardo Solórzano Flores, <u>Daniel Doham Aguilar Castro</u> , Fabiola Langner-Salinas, Carolina Paz Hovelmeyer Jurgens, Diya Mehta · Universidad Nacional Autónoma de Honduras
Best Research Abstract · International Medical Graduates	062 · Clinical and Diagnostic Characteristics of Abdominal Tuberculosis in Real-World Practice: Which Diagnostic Modalities Most Frequently Establish the Diagnosis? <u>Maria Camila Perez Vanegas</u> , Angie C. Perez, Johan S. Ramos, Maira A. Jimenez, Wilfredo Colmenares · Universidad de Pamplona, Colombia

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Abstract 001

Oral presentation

Case report

Residents & fellows

Persistent Occipital Neuralgia as the Initial Presentation of a Cognard Type V Hypoglossal Canal Dural Arteriovenous Fistula

Monica C. Correa-Alfonzo, Priamo Alexis Pichardo Gonzalez, Vasu Malhotra, Analise McGreal

Lakeland Regional Health

BACKGROUND

Occipital neuralgia is a common cause of posterior head pain, typically associated with musculoskeletal strain, cervical degenerative disease, trauma, or nerve entrapment. However, persistent symptoms despite appropriate therapy and atypical clinical features should prompt evaluation for secondary causes. Hypoglossal canal dural arteriovenous fistulas (HC-dAVFs) are rare vascular lesions that may present with nonspecific symptoms, leading to delayed diagnosis.

METHODS / CASE PRESENTATION

A previously healthy 24-year-old woman developed intermittent right-sided occipital pain following presumed neck strain. Symptoms progressed despite treatment with acetaminophen, nonsteroidal anti-inflammatory drugs, muscle relaxants, gabapentin, transcutaneous electrical nerve stimulation, chiropractic care, and physical therapy. Neurological examinations remained normal. Initial CT imaging of the head and cervical spine was unrevealing, and cervical MRI showed only mild degenerative changes and moderate right C4-C5 foraminal narrowing, findings insufficient to explain symptom severity. The patient continued to be diagnosed with cervicgia, occipital neuritis, and occipital neuralgia. Approximately five months after symptom onset, she developed right-sided pulsatile tinnitus, prompting further vascular evaluation. MRI/MRA demonstrated abnormal vascular enhancement near the craniovertebral junction. Digital subtraction angiography confirmed a high-grade Cognard type V HC-dAVF supplied predominantly by the right ascending pharyngeal artery, with venous drainage into the condylar venous system and spinal venous plexus.

RESULTS / FINDINGS

Given the high-risk spinal venous drainage pattern and potential for neurological complications, multidisciplinary evaluation by vascular neurosurgery and neurointerventional radiology recommended endovascular intervention. The patient underwent successful transarterial embolization with angiographic resolution of the arteriovenous shunting. Following treatment, her occipital pain and pulsatile tinnitus resolved, allowing return to normal daily activities.

DISCUSSION & CONCLUSION

This case highlights the importance of reassessing the diagnosis when symptoms fail to follow an expected course. Treatment-refractory occipital neuralgia, particularly when accompanied by pulsatile tinnitus, should raise suspicion for secondary vascular etiologies and prompt consideration of advanced vascular imaging. Cognard type V dAVFs are clinically significant due to their association with spinal venous hypertension, progressive myelopathy, and neurological deterioration if untreated. Avoiding premature diagnostic closure and maintaining a broad differential diagnosis can facilitate timely recognition and definitive treatment of rare but potentially serious vascular lesions.

Cite: Correa-Alfonzo MC, Pichardo Gonzalez PA, Malhotra V, McGreal A. Persistent Occipital Neuralgia as the Initial Presentation of a Cognard Type V Hypoglossal Canal Dural Arteriovenous Fistula. Oral presentation at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:001.

Abstract 002

Oral presentation

Original research

Residents & fellows

Effect of Interleukin-6 Pathway Inhibition on Apolipoprotein A1 and Apolipoprotein B: A Meta-Analysis

Ermilo Echeverria-Ortegon, Alfredo Perez Tagle Tejeda, Juan Pastor-Cervantes

Memorial Healthcare System

BACKGROUND

Elevated interleukin-6 (IL-6) is an established independent risk factor for coronary heart disease. apolipoprotein A1 (ApoA1) and apolipoprotein B (ApoB) outperform conventional lipids as cardiovascular risk markers, reflecting antiatherogenic HDL and atherogenic LDL/VLDL burden, respectively. IL-6 pathway inhibition, via receptor blockade or ligand inhibition, is increasingly used in patients with elevated cardiovascular risk, yet paradoxically raises apolipoprotein levels despite reducing inflammation. Given this inconsistently controlled evidence, we performed a meta-analysis quantifying the pooled effect of IL-6 pathway inhibition on ApoA1 and ApoB.

METHODS

PubMed, EBSCOhost, and the Cochrane Library were systematically searched for randomized controlled trials (RCTs) and observational studies evaluating IL-6 pathway inhibitors in adults with rheumatoid arthritis or elevated cardiovascular risk. The primary outcomes were change in ApoA1 and ApoB from baseline to follow-up. Studies were stratified a priori by design—RCT versus single-arm cohort—to account for the substantial methodological heterogeneity in comparator structure across the available literature. Mean differences (MD) with 95% confidence intervals (CI) were pooled using random-effects models (REML). Between-study heterogeneity was assessed using the I^2 statistic. All analyses were performed in RStudio using the meta package.

RESULTS

Six studies met inclusion criteria (2 RCTs, 4 single-arm cohorts; total $n=199$), evaluating tocilizumab ($n=5$ studies) and ziltivekimab ($n=1$ study). Random-effects pooling demonstrated a significant increase in ApoA1 (MD +10.21 mg/dL, 95% CI 2.36–18.06; $I^2=86\%$) and ApoB (MD +11.08 mg/dL, 95% CI 6.29–15.88; $I^2=32\%$) following IL-6 pathway inhibition. Effect estimates were directionally consistent and did not differ significantly between RCT and single-arm subgroups for either ApoA1 (+7.36 vs. +11.79 mg/dL; $p=0.55$) or ApoB (+10.58 vs. +11.69 mg/dL; $p=0.82$), suggesting the finding is robust across differing levels of methodological rigor, despite substantial heterogeneity, particularly for ApoA1.

DISCUSSION & CONCLUSION

IL-6 pathway inhibition is associated with a significant, consistent increase in both ApoA1 and ApoB across randomized and observational evidence. Because these two markers carry opposing atherogenic implications, the net effect of IL-6 blockade on cardiovascular risk cannot be inferred from apolipoprotein changes alone. These findings support incorporating apolipoprotein monitoring in patients receiving IL-6 pathway inhibitors and underscore the need for dedicated cardiovascular outcome trials to clarify the clinical significance of this lipid paradox.

Cite: Echeverria-Ortegon E, Perez Tagle Tejeda A, Pastor-Cervantes J. Effect of Interleukin-6 Pathway Inhibition on Apolipoprotein A1 and Apolipoprotein B: A Meta-Analysis. Oral presentation at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:002.

Abstract 003

Oral presentation

Case report

Residents & fellows

When a Tick Bite Mimics a Stroke: PCR-Confirmed Ehrlichial Meningoencephalitis Presenting with Expressive Aphasia and a Hyperferritinemic Syndrome

Aida Sarita Gonzalez, Usmaan Topiwala, Olu Oyesanmi, Sunil Rohatgi, Jennifer Waddy, Marion Capahi

HCA Florida Citrus Hospital

BACKGROUND

Human monocytic ehrlichiosis, caused by *Ehrlichia chaffeensis*, is a tick-borne infection classically associated with fever, leukopenia, and thrombocytopenia. Neurologic involvement is uncommon but may present with focal deficits mimicking acute stroke. We report PCR-confirmed ehrlichial meningoencephalitis presenting with acute expressive aphasia, inflammatory cerebrospinal fluid findings, profound hyperferritinemia, and concern for secondary hemophagocytic lymphohistiocytosis (HLH).

CASE PRESENTATION

A 68-year-old retired nurse with a history of right breast cancer status post lumpectomy and lymph node dissection, chronic hepatitis C, hypertension, and gastroesophageal reflux disease presented with fever (102.8°F), altered mental status, and acute expressive aphasia, prompting a stroke alert. Several days earlier, she had received trimethoprim-sulfamethoxazole for presumed urinary tract infection and subsequently developed a transient rash. CT head, CT angiography, CT perfusion, and brain MRI showed no acute cerebrovascular abnormality. Further history revealed a tick bite during travel in New Jersey approximately three weeks before symptom onset. Laboratory studies demonstrated leukopenia, anemia, severe thrombocytopenia (nadir 36,000/ μ L), ferritin 13,858 ng/mL, and hypofibrinogenemia, raising concern for secondary HLH. CSF demonstrated 153 WBC/ μ L with 97% mononuclear cells and protein 130 mg/dL, consistent with inflammatory meningoencephalitis. Whole-blood *E. chaffeensis* PCR was positive. Babesia testing was negative, and Lyme disease was excluded by negative PCR and serologic/CSF antibody index testing. EBV IgM and IgG positivity was considered a possible cofactor rather than confirmed acute coinfection.

FINDINGS

The patient was treated with doxycycline and supportive care. Empiric ceftriaxone was initially administered because of concern for neuroborreliosis and discontinued after negative Lyme testing. She demonstrated rapid clinical improvement, with resolution of fever and altered mental status and complete resolution of expressive aphasia. Platelet count recovered to 214,000/ μ L. Given the marked clinical and hematologic response to antimicrobial therapy, HLH-directed treatment and bone marrow biopsy were deferred.

DISCUSSION & CONCLUSION

Ehrlichial meningoencephalitis can present as a stroke mimic and should be considered in patients with acute neurologic deficits, fever, cytopenias, and relevant tick exposure, particularly when neuroimaging is unrevealing. Profound hyperferritinemia and hypofibrinogenemia may suggest secondary HLH; however, rapid improvement with antimicrobial therapy may support infection-driven hyperinflammation rather than primary HLH and guide decisions regarding invasive evaluation and immunosuppressive therapy. Early recognition and prompt doxycycline treatment are critical, as neurologic disease may be severe but reversible.

Cite: Gonzalez AS, Topiwala U, Oyesanmi O, Rohatgi S, Waddy J, Capahi M. When a Tick Bite Mimics a Stroke: PCR-Confirmed Ehrlichial Meningoencephalitis Presenting with Expressive Aphasia and a Hyperferritinemic Syndrome. Oral presentation at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:003.

Abstract 004

Oral presentation

Case report

Residents & fellows

Takayasu Arteritis Unmasked During Device Infection Evaluation in Non-Ischemic Cardiomyopathy

Alfredo Perez Tagle Tejada, Ermilo Echeverria-Ortegon, Qianlan Xi, Iani Patsias, Juan Pastor-Cervantes, Fergie J. Losiniecki

Memorial Healthcare System

BACKGROUND

Takayasu arteritis is a rare large-vessel vasculitis affecting approximately 1–3 individuals per million annually, predominantly women aged 20–40 years. Clinically apparent myocardial involvement is uncommon, although heart failure may result from hypertension, valvular disease, coronary vasculitis, or inflammatory myocardial dysfunction.

CASE PRESENTATION

A 29-year-old woman presented with severe nonischemic cardiomyopathy (LVEF 13%) and acute renal failure requiring temporary hemodialysis. Coronary angiography showed no obstructive disease. Positive ANA and low complement prompted empiric corticosteroids and mycophenolate. She was subsequently transferred in cardiogenic shock requiring milrinone and intravenous diuresis. Cardiac MRI demonstrated myocardial fibrosis, while endomyocardial biopsy showed no active myocarditis. Further evaluation was unrevealing, and cryptogenic nonischemic cardiomyopathy was diagnosed.

After one year of maximally tolerated guideline-directed medical therapy, LVEF improved to 28%, and an extracardiac ICD was implanted for primary prevention. Three weeks later, a pocket infection required system explantation. CT imaging unexpectedly demonstrated diffuse aortic and branch-vessel wall thickening with carotid, subclavian, and mesenteric involvement. Examination revealed an absent radial pulse, carotid bruits, and an inter-arm blood pressure discrepancy.

FINDINGS

Inflammatory markers were elevated. Intraoperative cultures grew MSSA, while blood cultures remained negative. Retrospective review of CT imaging from one year earlier demonstrated similar large-vessel wall thickening with skip lesions, supporting a longstanding vasculitic process consistent with Takayasu arteritis.

Repeat cardiac MRI demonstrated LVEF improvement to 48%. Given ventricular recovery and absence of sustained ventricular arrhythmias or prior ICD therapies, device reimplantation was deferred.

DISCUSSION & CONCLUSION

Takayasu arteritis may rarely present with severe unexplained cardiomyopathy before classic vascular manifestations become clinically apparent. In this case, large-vessel abnormalities were recognized incidentally during evaluation of an ICD-related infection, while retrospective imaging confirmed that the vasculitic process preceded the diagnosis by at least one year.

The absence of obstructive coronary disease or active myocarditis does not exclude cardiovascular involvement from Takayasu arteritis. Careful vascular examination and review of prior cross-sectional imaging were critical to diagnosis. This case also highlights the importance of reassessing ICD candidacy when ventricular dysfunction may be reversible and substantial LVEF recovery occurs.

Cite: Perez Tagle Tejada A, Echeverria-Ortegon E, Xi Q, Patsias I, Pastor-Cervantes J, Losiniecki FJ. Takayasu Arteritis Unmasked During Device Infection Evaluation in Non-Ischemic Cardiomyopathy. Oral presentation at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:004.

Abstract 005

Oral presentation

Systematic review

International medical graduates

Pharmacogenomics and Anesthesia: Is There an Ancestry-Related Response to Anesthetics in Hispanic/Latino Populations?

Sabrina Martinez, Daniela Rivera, Luis Isea Mercado

BACKGROUND

Individual variability in anesthetic response remains a challenge for surgical safety, perioperative outcomes, and acute pain management. Standard dosing guidelines assume relatively uniform drug metabolism across demographic groups, yet functional variants in cytochrome P450 (CYP450) enzymes alter the pharmacokinetics of opioids, sedatives, and amide local anesthetics. Hispanic/Latino populations carry highly heterogeneous genomes reflecting Indigenous American, European, and African ancestry in continuously varying proportions. Despite being a rapidly growing demographic, they remain markedly underrepresented in pharmacogenomic and perioperative research, and existing genotype-guided dosing guidelines derive largely from European and East Asian cohorts. This review evaluates current evidence on CYP450 variation across Hispanic/Latino subpopulations and its impact on perioperative drug safety, analgesic efficacy, and anesthetic requirements, and asks whether ancestry-related pharmacogenomic differences are clinically meaningful.

METHODS

A structured literature search was performed in PubMed/MEDLINE, EMBASE, and SciELO for peer-reviewed studies published 2015–2025. Search terms combined the concepts pharmacogenetics, anesthesia, cytochrome P-450 enzyme system, opioids, and Hispanic or Latino. Clinical trials, observational studies, meta-analyses, and systematic reviews examining genotype-phenotype correlations in perioperative drug metabolism within Hispanic/Latino cohorts were included.

RESULTS

Evidence demonstrates that CYP2D6 allele and phenotype frequencies vary widely across Hispanic/Latino subpopulations according to the proportion of Indigenous American, European, and African ancestry rather than following a single "reference" distribution. Poor-metabolizer frequencies are often lower than in European populations (approximately 2–7% vs 7–10%), reflecting reduced frequency of loss-of-function alleles such as CYP2D6*4, whereas increased-activity gene duplications and African-associated alleles create clinically relevant ultra-rapid and intermediate metabolizer subgroups. This variability produces unpredictable bioactivation of opioid prodrugs such as codeine and tramadol, exposing patients to either therapeutic failure or toxicity, including life-threatening respiratory depression. CYP3A4/CYP3A5 variation, together with drug-transporter (ABCB1) and nuclear-receptor (NR1I2/PXR) polymorphisms, influences midazolam clearance and post-anesthesia recovery, whereas CYP2C19 variation is relevant to diazepam. Evidence that CYP genotype meaningfully alters amide local-anesthetic (e.g., bupivacaine, ropivacaine, lidocaine) block duration in humans remains limited; sodium-channel variants and tissue-level factors are more established contributors.

CONCLUSION

Ancestry-related genetic variation supports clinically meaningful differences in perioperative drug response across Hispanic/Latino subpopulations, though these reflect an admixture continuum rather than a discrete ethnic category. Because current pharmacogenomic guidelines are built primarily on non-Hispanic cohorts, expanding representation and incorporating pharmacogenomic considerations and targeted screening into pre-anesthetic evaluation are essential steps toward equitable, precision anesthesia care that optimizes analgesia while minimizing preventable adverse drug events in diverse surgical populations.

Cite: Martinez S, Rivera D, Isea Mercado L. Pharmacogenomics and Anesthesia: Is There an Ancestry-Related Response to Anesthetics in Hispanic/Latino Populations?. Oral presentation at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:005.

Abstract 006

Poster

Case report

Medical students

Artificial intelligence for diabetic retinopathy screening in primary care: Diagnostic accuracy and real-world implementation

Dulce Valeria Peláez Escamilla, Adihary Iveth Ramos Flores

LATIMGS

BACKGROUND

Diabetic retinopathy is a leading cause of preventable vision loss, yet adherence to recommended retinal screening remains suboptimal. Artificial intelligence-based systems can analyze retinal photographs in primary care settings and may improve access to early detection. This review evaluates the diagnostic performance and practical implementation of artificial intelligence-assisted diabetic retinopathy screening outside traditional ophthalmology clinics.

METHODS

A focused literature review was conducted using PubMed. English-language studies published from January 2024 through September 2026 were reviewed. Systematic reviews, meta-analyses, and prospective or real-world studies evaluating artificial intelligence-assisted diabetic retinopathy screening in primary care, endocrinology, or population-based settings were included. Outcomes of interest were sensitivity, specificity, image gradability, workflow integration, patient and staff acceptance, and referral outcomes.

RESULTS / FINDINGS

Ten publications were included. Recent meta-analyses reported patient-level sensitivities ranging from 87.7% to 94.0% and specificities from 89.0% to 90.6%. Real-world primary-care studies showed wider ranges, with sensitivities from 73.7% to 98.2% and specificities from 90.2% to 99.8%. Differences in image quality, screening thresholds, devices, and clinical workflow contributed to variability in performance. Poor-quality retinal images were associated with lower sensitivity in prospective studies. Some systems provided definitive nonmydriatic screening results in more than 95% of patients, and recent implementation studies reported favorable acceptance among patients and healthcare staff.

DISCUSSION & CONCLUSION

Artificial intelligence-assisted retinal screening shows strong diagnostic performance and may support earlier detection of diabetic retinopathy in primary care and other non-ophthalmology settings. However, effectiveness in routine practice depends on image quality, device selection, workflow integration, and appropriate ophthalmic referral. These systems can expand access to diabetic eye screening but do not replace a complete ophthalmologic evaluation when disease is detected or images are not interpretable. Further studies should evaluate cost-effectiveness, long-term outcomes, and performance across diverse and underserved populations, including Hispanic/Latino communities.

Cite: Peláez Escamilla DV, Ramos Flores AI. Artificial intelligence for diabetic retinopathy screening in primary care: Diagnostic accuracy and real-world implementation. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:006.

Abstract 007

Poster

Case report

Medical students

Defying the Demographics: A “Triple Atypical” Presentation of Severe Autoimmune Hepatitis in an Older Adult Male

Gabriela Rodriguez, Diego Pastorini, Enya Morera, Elizabeth Otero, Lidice Hernandez, Nadim Aoun, Ryan Sappenfield, Kevin Perry, Jose Muniz

Ross University School of Medicine

BACKGROUND

Autoimmune hepatitis (AIH) is a chronic, immune-mediated liver disease predominantly affecting young to middle-aged females with a 4:1 female-to-male ratio. Antimitochondrial antibodies (AMA), the serological hallmark of primary biliary cholangitis (PBC), occur in approximately 5% of patients with pure AIH without histological bile duct injury. AMA positivity may suggest AIH/PBC overlap syndrome per the Paris criteria; however, liver biopsy remains essential for definitive diagnosis. Severe acute liver injury in an older adult male represents a significant departure from the typical AIH phenotype and poses unique diagnostic challenges that risk delayed or incorrect treatment.

CASE PRESENTATION

An older adult male with hyperlipidemia and remote cholecystectomy presented with three months of progressive jaundice, dark urine, fatigue, nausea, and 35-pound unintentional weight loss. Liver tests several weeks prior had been normal. He developed severe hepatocellular injury with ALT 1789 U/L, AST 1380 U/L, total bilirubin 17.9 mg/dL, and coagulopathy (INR 2.0). Comprehensive viral and toxicologic workups were negative. Serological evaluation revealed dual positivity for anti-smooth muscle antibodies and AMA, ANA 1:320, anti-M2 positivity, and elevated IgG (1648 mg/dL), initially raising concern for AIH/PBC overlap syndrome. Percutaneous liver biopsy was performed after correction of coagulopathy, and empiric immunosuppression was initiated.

FINDINGS

Liver biopsy demonstrated extensive lobular disarray, hepatocyte ballooning, interface hepatitis, confluent necrosis, hepatocyte rosettes, and dense portal inflammatory infiltrates rich in plasma cells. Critically, there was no marked bile duct injury, ductopenia, or florid duct lesion, excluding overlap syndrome and confirming pure AMA-positive AIH. The patient was treated with prednisone and azathioprine, remaining hemodynamically stable without hepatic encephalopathy or decompensation, consistent with severe acute liver injury rather than acute liver failure.

DISCUSSION & CONCLUSION

This case illustrates a “triple atypical” presentation of AIH: older age, male sex, and severe acute onset with confounding AMA-positive serology. Although serological features partially met Paris criteria for overlap syndrome, histopathology confirmed pure AIH without bile duct pathology. AMA-positive AIH patients respond well to immunosuppressive therapy and do not evolve into PBC during long-term follow-up. A limitation is that this is a single case, and continued follow-up is needed to confirm sustained remission. This case reinforces that AMA positivity alone is insufficient to diagnose overlap syndrome and underscores the indispensable role of liver biopsy when clinical and serological features are discordant. Clinicians must maintain AIH in the differential diagnosis of severe acute liver injury regardless of atypical demographics, as early recognition and aggressive immunosuppression are critical to preventing progression to acute liver failure and the need for transplantation.

Cite: Rodriguez G, Pastorini D, Morera E, et al. Defying the Demographics: A “Triple Atypical” Presentation of Severe Autoimmune Hepatitis in an Older Adult Male. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:007.

Abstract 008

Poster

Case report

Medical students

Early Bilateral Thyroid Metastasis from Clear Cell Renal Cell Carcinoma with Co-occurring VHL and TP53 Mutations: A Case Report

Ana Paula Gaxiola Albarran, Melissa Canales Pages, Lucía de la Mora Vargas

Universidad Anáhuac; LATIMGS

INTRODUCTION

Clear cell renal cell carcinoma (ccRCC) is a recognized source of thyroid metastases, typically presenting after a prolonged disease-free interval following nephrectomy. Early thyroid involvement is unusual and can be diagnostically challenging because metastatic ccRCC may mimic benign thyroid disease or a primary thyroid neoplasm. We report an uncommon case of early, sequential bilateral thyroid metastasis from ccRCC associated with co-occurring VHL and TP53 mutations.

CASE PRESENTATION

A 65-year-old man initially presented with hematuria and anemia and was diagnosed with grade 3 ccRCC. He underwent right radical nephrectomy and adrenalectomy. Pathologic staging was pT3aN0M0 with negative surgical margins, and postoperative imaging showed no residual or metastatic disease. Approximately three years later, thyroid ultrasound performed for thyroid enlargement demonstrated heterogeneous echotexture and patchy hypoechogenicity initially interpreted as possible thyroiditis. Subsequent evaluation led to right hemithyroidectomy. Histopathologic examination demonstrated metastatic ccRCC involving the thyroid. Immunohistochemistry showed tumor cells negative for TTF-1 and thyroglobulin and positive for CAIX, supporting renal origin. Molecular profiling identified co-occurring VHL and TP53 mutations. Approximately 12 months after the initial thyroid surgery, surveillance identified a new metastatic lesion in the contralateral thyroid lobe, and the patient was evaluated for completion thyroidectomy.

DISCUSSION

This case is distinguished by the unusually short interval between nephrectomy and thyroid metastasis, followed by rapid sequential involvement of the contralateral thyroid lobe. Thyroid metastases from RCC can resemble thyroiditis or primary thyroid neoplasms radiologically and cytologically, emphasizing the importance of considering metastatic disease in patients with a history of RCC. Immunohistochemistry was essential in establishing the diagnosis. VHL alterations are characteristic of ccRCC, whereas TP53 mutations are considerably less common. The coexistence of these alterations in a tumor demonstrating early and recurrent metastatic behavior raises the possibility that the molecular profile may reflect biologically aggressive disease, although a causal relationship cannot be established from a single case.

CONCLUSION

Thyroid metastasis should remain in the differential diagnosis of new thyroid abnormalities in patients with a history of ccRCC, even when imaging suggests benign thyroid disease and the interval from nephrectomy is relatively short. This case highlights an unusual pattern of early, sequential bilateral thyroid metastasis and demonstrates the diagnostic value of immunohistochemistry and molecular characterization. Recognition of atypical metastatic patterns may facilitate earlier diagnosis and inform multidisciplinary surveillance and management.

Cite: Gaxiola Albarran AP, Canales Pages M, de la Mora Vargas L. Early Bilateral Thyroid Metastasis from Clear Cell Renal Cell Carcinoma with Co-occurring VHL and TP53 Mutations: A Case Report. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:008.

Abstract 009

Poster

Case report

Medical students

Inhaled CFTR mRNA Therapy in Cystic Fibrosis: Emerging Opportunities for Pediatric Precision Medicine

Adihary Iveth Ramos Flores, Dulce Valeria Peláez Escamilla, Joshua Becker Mayorga

LATIMGS

BACKGROUND

Cystic fibrosis (CF) is a life-limiting autosomal recessive disease caused by pathogenic CFTR variants. CFTR encodes an epithelial ion channel regulating chloride and bicarbonate transport and airway surface hydration. CFTR dysfunction produces dehydrated, viscous mucus, impaired mucociliary clearance, chronic infection, and progressive lung damage. CFTR modulators, including elexacaftor/tezacaftor/ivacaftor, improve the function or processing of specific mutant CFTR proteins but remain genotype-dependent, leaving approximately 10% of people with CF without an effective modulator option. Inhaled CFTR messenger RNA (mRNA) replacement offers a potentially mutation-agnostic approach by delivering temporary instructions for functional CFTR production directly to airway epithelial cells.

METHODS / CASE PRESENTATION

A narrative literature review of recent PubMed-indexed clinical and preclinical studies was conducted focusing on inhaled CFTR mRNA replacement, lipid nanoparticle (LNP) delivery, pulmonary targeting, and non-viral RNA therapeutics. Studies were evaluated for delivery efficiency, restoration of CFTR function, mucociliary clearance, safety, and translational potential, emphasizing advances relevant to pediatric precision medicine.

RESULTS / FINDINGS

The first-in-human randomized phase 1/2 study of aerosolized MRT5005 included 42 adults with CF. Ten participants experienced at least one febrile reaction, accounting for 14 events overall, and two experienced hypersensitivity reactions. No consistent improvement in forced expiratory volume in one second (FEV1), a standard measure of lung function, was demonstrated, establishing feasibility but not clinical efficacy. More recent strategies have focused on improving mRNA delivery to airway cells using LNPs, which protect mRNA and facilitate cellular uptake. Peptide-functionalized LNPs selected through phage display increased reporter activity up to 7.8-fold in CF bronchial epithelial cultures and 3.4-fold in mouse lungs compared with untargeted LNPs. Preclinical LUNAR-CFTR, an LNP containing codon-optimized human CFTR mRNA, restored CFTR-mediated ion transport in polarized CF human bronchial epithelial models to levels comparable to elexacaftor/tezacaftor/ivacaftor and increased mucociliary clearance approximately threefold in CF ferrets after a single dose.

DISCUSSION & CONCLUSION

The field has progressed from first-in-human feasibility toward increasingly efficient and targeted pulmonary mRNA delivery. These findings support CFTR mRNA replacement as a potentially mutation-agnostic strategy, particularly for patients who cannot benefit from existing CFTR modulators. However, major barriers remain, including penetration of airway mucus, efficient epithelial uptake, intracellular release of mRNA, transient protein expression, immunologic tolerability, the need for repeat dosing, and translation of preclinical findings into meaningful clinical outcomes. Earlier restoration of CFTR function could theoretically benefit children before irreversible structural lung disease develops, but pediatric efficacy and long-term safety remain unestablished. Continued optimization of LNP delivery and prospective clinical evaluation are required before inhaled CFTR mRNA replacement can become a validated pediatric precision-medicine strategy.

Cite: Ramos Flores AI, Peláez Escamilla DV, Becker Mayorga J. Inhaled CFTR mRNA Therapy in Cystic Fibrosis: Emerging Opportunities for Pediatric Precision Medicine. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:009.

Abstract 010

Poster

Case report

Medical students

Life-Threatening Laryngeal Angioedema in C1-Esterase Inhibitor Deficiency: A Possible Propofol-Associated Exacerbation

Guillermo Gomez, Jose Samuel Perez, Dale Calixte, Shah Mili

University of Central Florida

BACKGROUND

Hereditary angioedema (HAE) secondary to C1-esterase inhibitor (C1-INH) deficiency is a rare bradykinin-mediated disorder that can cause severe, potentially fatal airway edema. Identification of precipitating or exacerbating factors is critical when angioedema persists despite treatment. Propofol is commonly used for induction and sedation during mechanical ventilation and contains soybean oil. Although propofol-associated hypersensitivity and angioedema are rare, its potential role in patients with underlying angioedema warrants consideration.

CASE PRESENTATION

An 83-year-old woman with hypertension and a lifelong history of recurrent angioedema presented with acute, progressively worsening dyspnea, stridor, and upper-airway edema requiring emergent endotracheal intubation. Propofol was administered for induction and continued for sedation. Laboratory evaluation demonstrated a decreased C4 level, supporting an underlying C1-INH deficiency-associated angioedema. Despite treatment with corticosteroids, antihistamines, racemic epinephrine, bronchodilators, and antibiotics, significant airway edema persisted, resulting in prolonged mechanical ventilation. Review of her medical history identified a documented soybean allergy. Because propofol contains soybean oil, propofol was considered a potential contributor to the persistent angioedema and was discontinued. Following discontinuation, the patient's airway edema progressively improved and C4 levels stabilized. On ICU day 6, she demonstrated a positive cuff-leak test, successfully completed a spontaneous breathing trial, and was extubated.

RESULTS / FINDINGS

The patient's angioedema failed to improve despite conventional therapy while receiving propofol and subsequently improved after propofol discontinuation. Stabilization of C4 levels occurred concurrently with clinical improvement, and the patient was successfully liberated from mechanical ventilation. The combination of lifelong recurrent angioedema, low C4, documented soybean allergy, propofol exposure, persistent airway edema, and improvement following propofol discontinuation raised concern for a propofol-associated exacerbation of underlying C1-INH deficiency-mediated angioedema.

DISCUSSION & CONCLUSION

This case highlights a potentially important interaction between an underlying bradykinin-mediated angioedema disorder and exposure to a medication capable of provoking hypersensitivity reactions. In patients with suspected or known HAE who develop persistent airway edema after intubation, clinicians should reassess medications and potential allergens rather than assuming that ongoing edema represents the natural course of HAE alone. The temporal improvement following propofol discontinuation and subsequent identification of soybean allergy suggest a possible association between propofol exposure and exacerbation of this patient's angioedema. Although causality cannot be established from a single case, this case emphasizes the importance of reviewing allergy histories and medication ingredients when managing life-threatening angioedema.

Cite: Gomez G, Perez JS, Calixte D, Mili S. Life-Threatening Laryngeal Angioedema in C1-Esterase Inhibitor Deficiency: A Possible Propofol-Associated Exacerbation. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:010.

Abstract 011

Poster

Case report

Medical students

One Tumor, Two Readings: Interpreting DOTATATE Uptake in Biopsy-Proven Pancreatic Adenocarcinoma

Gabriela Rodriguez, Diego Pastorini, Amaris Sotolongo, Jordan Chung, Enya Morera, Solange Olivares, Rolando Perez, Jose Muniz

Ross University School of Medicine

BACKGROUND

Pancreatic ductal adenocarcinoma (PDAC) accounts for the vast majority of pancreatic malignancies and carries a five-year survival rate of approximately twelve percent. Pancreatic neuroendocrine neoplasms are rare mimics with markedly different prognoses and treatment strategies. A diagnostic challenge arises when biopsy-proven adenocarcinoma coexists with imaging features suggesting neuroendocrine biology, raising the possibility of a Mixed Neuroendocrine-Non-neuroendocrine Neoplasm (MiNEN). Dual-tracer PET phenotyping, which combines FDG-PET with somatostatin receptor (SSTR)-targeted imaging, complements histopathology by mapping whole-body tumor biology and identifying therapeutic targets that a single-site biopsy cannot capture. NCCN Guidelines endorse this combined imaging approach for neuroendocrine tumors while recommending treatment directed at the most aggressive histologic component in mixed histologies. This case matters because it demonstrates how functional imaging can reveal actionable biology beyond tissue diagnosis, refining prognosis and expanding future therapeutic options without altering appropriate first-line therapy.

CASE PRESENTATION

An elderly female presented with abdominal distension and left flank pain of several days' duration. CT imaging revealed a pancreatic mass measuring 5.4 by 4.2 centimeters with vascular encasement and splenic vein thrombosis. CA 19-9 was elevated at 209 U/mL in the absence of jaundice, validating it as a true tumor marker rather than a biliary artifact. Endoscopic ultrasound-guided fine needle aspiration cytology confirmed pancreatic ductal adenocarcinoma arising in a background of intraductal papillary mucinous neoplasm with high-grade dysplasia. FDG-PET/CT demonstrated an FDG-avid pancreatic mass without distant metastases. A subsequent ⁶⁴Cu-DOTATATE PET/CT revealed unexpected SSTR uptake with a maximum SUV of 7.5 in the pancreatic head and 8.0 in the body and tail.

FINDINGS

The combined imaging established a dual-positive SSTR+/FDG+ phenotype, classified as D2 on the NETPET scale. The NETPET classification stratifies tumors into D1 (SSTR+/FDG-, most favorable), D2 (SSTR+/FDG+, intermediate), and D3 (SSTR-/FDG+, least favorable) prognostic categories, and FDG positivity independently predicts reduced survival after controlling for tumor grade. Because the biopsy confirmed adenocarcinoma and the elevated CA 19-9 supported a dominant PDAC component, systemic therapy with gemcitabine and nab-paclitaxel was initiated in accordance with NCCN guidance. The SSTR-avidity simultaneously established eligibility for future peptide receptor radionuclide therapy should PDAC-directed therapy fail.

DISCUSSION & CONCLUSION

This case illustrates the complementary roles of histopathology and dual-tracer PET phenotyping in diagnostically challenging pancreatic neoplasms. Tissue diagnosis remains the gold standard for treatment selection, yet functional imaging revealed an SSTR-positive component not captured by single-site biopsy, raising the possibility of MiNEN and providing prognostic information invisible on cytology alone. The D2 phenotype refined risk stratification while preserving guideline-concordant chemotherapy. Dual-tracer PET phenotyping should be considered when clinical, biochemical, or imaging features are discordant with initial pathology, as it can uncover actionable biology and expand therapeutic options.

Cite: Rodriguez G, Pastorini D, Sotolongo A, et al. One Tumor, Two Readings: Interpreting DOTATATE Uptake in Biopsy-Proven Pancreatic Adenocarcinoma. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:011.

Abstract 012

Poster

Case report

Medical students

Retinopathy of prematurity screening in Latin America: A narrative review of barriers, implementation gaps, and emerging solutions

Dulce Valeria Peláez Escamilla, Adihary Iveth Ramos Flores

LATIMGS

BACKGROUND

Retinopathy of prematurity (ROP) is a leading preventable cause of childhood blindness. Because severe ROP can progress rapidly, infants at risk need repeated eye examinations during a narrow window in which treatment can preserve vision. In Latin America, improved survival of preterm infants has increased the need for reliable screening, yet access remains uneven. This review examines barriers to ROP screening and strategies that may improve timely access across the region.

METHODS

A focused narrative review of PubMed-indexed literature published from 2015 through September 2026 was conducted. Search terms included “retinopathy of prematurity,” “screening,” “Latin America,” “barriers,” “telemedicine,” and “artificial intelligence.” Studies addressing screening coverage, adherence to national criteria, specialist availability, imaging capacity, follow-up, geographic access, policy implementation, and technology-supported screening were prioritized. Evidence from Mexico, Brazil, Argentina, and multicountry regional studies was synthesized.

RESULTS / FINDINGS

Across studies, the main problem was not the absence of screening recommendations but inconsistent implementation. In 32 neonatal intensive care units across five Mexican states, only 31.2% had fully compliant ROP programs; 34.4% had no program and 34.4% had noncompliant programs. Reported limitations included irregular screening, limited ophthalmologist availability, equipment constraints, transfers for examination or treatment, and costs to families. In Brazil, 86% of 78 ophthalmologists involved in ROP care reported following national screening criteria, but retinal imaging was available to only 16.9%, and post-discharge follow-up was inconsistent. A 2026 analysis of 333 respondents from 17 Latin American countries also found substantial variation in adherence to national screening thresholds. Argentina showed that coordinated national action can improve access: participating services expanded from 14 to 98 and screening exceeded 90%. A 2025 study in Mexico and Argentina tested a lower-cost approach using smartphone-recorded retinal videos and machine learning to identify possible ROP, achieving 93.3% patient-level sensitivity, although specificity and accuracy were lower than ophthalmologist assessment.

DISCUSSION & CONCLUSION

The evidence suggests that preventable vision loss from ROP in Latin America is driven largely by gaps between national recommendations and their implementation in clinical practice. Shortages of trained specialists, limited imaging capacity, geographic barriers, weak follow-up, and program organization can interrupt screening before infants receive complete evaluation. National coordination, reliable referral and follow-up pathways, workforce development, telemedicine, and lower-cost imaging may improve access. Artificial intelligence may extend screening capacity in resource-limited settings but should support, not replace, specialist evaluation. Interpretation is limited by heterogeneous study designs and uneven representation across countries.

Cite: Peláez Escamilla DV, Ramos Flores AI. Retinopathy of prematurity screening in Latin America: A narrative review of barriers, implementation gaps, and emerging solutions. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:012.

Abstract 013

★ Best Case Report — Medical Students

Poster

Case report

Medical students

When Pulmonary Nodules Are Not Malignant: A Case Report of Granulomatosis with Polyangiitis in a Patient with Giant Cell Arteritis

Katherine Obiaja Hernandez, Lensay Leon, Mabel Rodriguez Barrios, Nicholas Sakellarios

Florida State University College of Medicine

BACKGROUND

Granulomatosis with polyangiitis (GPA) can present with pulmonary nodules and renal lesions that mimic malignancy. Long-term glucocorticoid treatment for another vasculitis may also partially suppress inflammatory findings and delay recognition. Giant cell arteritis (GCA) often coexists with polymyalgia rheumatica (PMR) and requires prolonged glucocorticoid therapy. We present a patient with GCA and PMR on long-term prednisone who years later developed granulomatous pulmonary nodules and positive ANCA, revealing delayed granulomatosis with polyangiitis (GPA) initially mimicking malignancy.

CASE PRESENTATION

A 75-year-old man with GCA, PMR, low-grade prostate cancer, and a smoking history presented for evaluation of enlarging pulmonary nodules. He had received long-term prednisone for GCA/PMR, including 20 mg daily in 2022, which was later tapered. Computed tomography (CT) showed growth of a right upper lobe nodule from 4 mm to 10 mm over one year, an additional 5 mm right middle lobe nodule, and mediastinal lymphadenopathy. The findings were categorized as Lung-RADS 4B. Positron emission tomography/computed tomography demonstrated a fluorodeoxyglucose-avid 0.9 cm cavitary right upper lobe nodule with mediastinal and bilateral hilar adenopathy. Although he remained asymptomatic during serial imaging, concern for malignancy led to robotic bronchoscopy, right upper lobe wedge resection, and lymphadenectomy. Pathology showed necrotizing granulomatous inflammation with mixed acute and chronic inflammation, as well as benign sampled lymph nodes. Infectious causes, including mycobacterial disease, were excluded.

FINDINGS

The following year, the patient developed an unintentional 20-pound weight loss, fatigue, and decreased appetite. CT of the thorax, abdomen, and pelvis showed a new 12 x 8 mm right middle lobe nodule and a 3.9 x 4.3 cm low-attenuation lesion in the upper pole of the left kidney. The renal lesion was non-enhancing and favored a chronic infectious or inflammatory process rather than malignancy. Despite the absence of sinusitis, hemoptysis, renal dysfunction, or active glomerulonephritis, he was PR3-ANCA positive. GPA was diagnosed based on PR3-ANCA positivity, prior necrotizing granulomatous lung histology, and pulmonary and renal involvement. He was still taking prednisone 10 mg daily at diagnosis. Treatment with rituximab was initiated, prednisone was tapered off, and follow-up imaging showed resolution of most of the pulmonary nodules and a significant decrease in the renal lesion.

DISCUSSION & CONCLUSION

This case describes GPA closely mimicking malignancy in a patient with smoking history, low-grade prostate cancer, weight loss, FDG-avid cavitary pulmonary nodules, and a renal mass-like lesion. The absence of classic upper airway symptoms and glomerulonephritis made the diagnosis less apparent. GPA should remain in the differential diagnosis for recurrent or migratory pulmonary nodules with renal lesions, particularly when pathology shows granulomatous inflammation and the clinical course is inconsistent with malignancy. Long-term prednisone may have masked the clinical expression of GPA, although this cannot be established from a single case.

Cite: Obiaja Hernandez K, Leon L, Rodriguez Barrios M, Sakellarios N. When Pulmonary Nodules Are Not Malignant: A Case Report of Granulomatosis with Polyangiitis in a Patient with Giant Cell Arteritis. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:013.

Abstract 014

Poster

Case report

Medical students

When Step-Up Escalates: Infected Necrotizing Pancreatitis with Colonic Ischemia Requiring Staged Reconstruction

Alejandro Alvarez, Yanet Rios, Aitor J. Roche Perez, Stepideh Garrosi, Daniela Oliva Garcia, Kiara Mercade
Ross University School of Medicine

BACKGROUND

Infected necrotizing pancreatitis carries substantial morbidity and is usually managed with a step-up strategy, beginning with drainage and reserving surgery for patients who fail less invasive therapy. Progressive sepsis and bowel complications may require earlier operative source control.

CASE PRESENTATION

A 25-year-old woman developed severe gallstone pancreatitis complicated by acute hypoxemic respiratory failure and acute kidney injury. She underwent laparoscopic cholecystectomy and was later readmitted with fever, dyspnea, leukocytosis, persistent abdominal pain, and an enlarging pancreatic fluid collection. Endoscopic ultrasound-guided cystogastrostomy with placement of a lumen-apposing metal stent was performed for drainage. Despite this, her condition worsened, raising concern for infected pancreatic necrosis. Exploratory laparotomy revealed extensive infected necrotic pancreatic tissue with colonic involvement. Pancreatic debridement, left hemicolectomy, splenectomy, and temporary abdominal closure with negative-pressure therapy were performed. Because bowel viability remained a concern, a planned re-exploration was undertaken. At the second operation, the laparotomy packs were removed and the bowel was reassessed. New ischemia of the transverse colon was identified, requiring transverse colectomy with stapled transverse-to-sigmoid colocolostomy. After washout and drain placement, definitive fascial closure was achieved. She remained in the intensive care unit on mechanical ventilation with ongoing management by surgery, gastroenterology, pulmonary/critical care, and infectious disease. Follow-up imaging showed interval improvement of the pancreatic collection.

DISCUSSION

This case demonstrates how severe necrotizing pancreatitis can progress despite appropriate endoscopic drainage. The development of colonic ischemia changed the clinical problem from one of drainage alone to one requiring operative source control. Planned re-exploration was particularly important because it allowed reassessment of bowel viability and recognition of ischemia that had evolved after the initial operation.

CONCLUSION

The step-up approach remains appropriate for infected necrotizing pancreatitis, but it should not delay surgery when sepsis persists, or bowel ischemia develops. In selected patients, temporary abdominal closure with planned re-exploration can provide time for physiologic stabilization, repeated assessment of bowel viability, and safer delayed reconstruction.

Cite: Alvarez A, Rios Y, Roche Perez AJ, Garrosi S, Oliva Garcia D, Mercade K. When Step-Up Escalates: Infected Necrotizing Pancreatitis with Colonic Ischemia Requiring Staged Reconstruction. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:014.

Abstract 015

Poster

Systematic review

Medical students

Association Between Blood Group O and Bleeding Risk Beyond von Willebrand Factor Levels: A Systematic Review

Daniela Lopez

Orlando College of Osteopathic Medicine

BACKGROUND

Blood group O is associated with lower circulating levels of von Willebrand factor (VWF) and factor VIII (FVIII), raising concern for increased bleeding risk. Whether blood group O contributes to bleeding risk beyond its association with these coagulation factors remains uncertain.

METHODS

A systematic review was conducted in accordance with PRISMA 2020 and PRISMA-S guidelines. PubMed was searched for studies published between January 2010 and November 2025. Observational studies comparing bleeding-related outcomes in individuals with blood group O versus non-O blood groups across trauma, obstetric, and surgical populations were included. Two reviewers independently screened studies, extracted data, and assessed risk of bias using the Newcastle–Ottawa Scale. Due to substantial clinical and methodological heterogeneity, findings were synthesized narratively.

RESULTS

Of 63 records identified, six observational studies comprising 92,661 participants met inclusion criteria. Study quality ranged from moderate to high. Associations between blood group O and bleeding outcomes were heterogeneous and context-dependent. Increased bleeding-related risk was observed among trauma patients with severe physiologic stress, including higher odds of hyperfibrinolysis (adjusted OR 1.94, 95% CI 1.09–3.47) and massive transfusion (adjusted OR 3.02, 95% CI 1.22–7.49), as well as among obstetric patients with moderate thrombocytopenia (postpartum hemorrhage: adjusted OR 11.0, 95% CI 2.4–49.6). In contrast, studies in unselected obstetric cohorts and elective surgical populations largely reported no significant association. Only two studies measured VWF or FVIII levels, and none incorporated these variables into multivariable models.

DISCUSSION AND CONCLUSION

Blood group O demonstrates a context-dependent association with bleeding-related outcomes, functioning as a potential modifier of bleeding risk in high-risk clinical settings rather than as a universal predictor. Whether blood group O independently increases bleeding risk beyond its effects on VWF and FVIII remains unclear and warrants further prospective investigation.

Cite: Lopez D. Association Between Blood Group O and Bleeding Risk Beyond von Willebrand Factor Levels: A Systematic Review. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:015.

Abstract 016

Poster

Original research

Medical students

Atypical Dermatological Manifestations as Initial Signs of Acute Leukemia in Pediatrics: Incidence Analysis and Diagnostic Delays

Ximena Itzel González Lazcano Vences

Supervising author: Julieta Arguelles

LATIMGS Academy, Houston, TX; Dell Children's Medical Center, UT Austin, TX

BACKGROUND

Acute leukemia is the most common malignancy in pediatrics, accounting for approximately 30% of all childhood cancer diagnoses. While classic presentations typically feature fever, hepatosplenomegaly, and leukocytosis, atypical extramedullary manifestations like leukemia cutis frequently mimic infectious or inflammatory dermatoses. In the absence of circulating peripheral blasts, these cutaneous signs cause severe diagnostic ambiguity and critical therapeutic delays.

Hypothesis Pediatric acute leukemias presenting with primary dermatological infiltrates experience a markedly longer diagnostic delay and higher rates of initial misclassification compared to those presenting with classic hematologic symptoms, underscoring the necessity of early tissue histopathological evaluation.

METHODS

A retrospective synthesis and comparative analysis of clinical data from recent literature (2015–2025) were conducted on pediatric patients presenting with acute leukemia manifesting primarily via cutaneous infiltrates. Evaluated variables included time-to-diagnosis, initial peripheral blood smear accuracy, frequency of misleading initial diagnoses, and subsequent cytogenetic abnormalities.

RESULTS

Analysis of atypical presentations reveals that up to 25–30% of congenital and infant leukemia cases exhibit cutaneous infiltration as the primary sign. Initial peripheral blood screening and immunophenotyping frequently yielded false-negative results in over 50% of these cases due to the absence of circulating leukemic blasts at onset. The average diagnostic delay for patients presenting primarily with dermatological features ranged from 10 to 21 days longer than for patients with classical systemic presentations. Diagnostic accuracy was achieved primarily through secondary skin biopsies with immunohistochemistry or bone marrow evaluation prompted by persistent cytopenias or hyperinflammatory complications like secondary hemophagocytic lymphohistiocytosis (HLH).

CONCLUSIONS

Atypical dermatological manifestations in pediatrics serve as a critical warning sign of underlying acute leukemia that can easily bypass standard peripheral hematologic screening. Implementing early skin biopsy protocols in pediatrics patients with unexplained purpuric or nodular rashes is imperative to mitigate therapeutic delays, bypass initial misdiagnoses, and improve long-term clinical outcomes in pediatric oncology.

Cite: González Lazcano Vences XI. Atypical Dermatological Manifestations as Initial Signs of Acute Leukemia in Pediatrics: Incidence Analysis and Diagnostic Delays. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:016.

Abstract 017

Poster

Original research

Medical students

Beyond Weight Loss: How GLP-1 Receptor Agonists May Remodel the Tumor Microenvironment

Ana Paula Gaxiola Albarran

Universidad Anáhuac; LATIMGS

INTRODUCTION

Glucagon-like peptide-1 receptor agonists (GLP-1RAs) have transformed the management of obesity and type 2 diabetes. Beyond their metabolic effects, emerging evidence suggests that GLP-1 signaling may influence tumor biology through modulation of immune function, inflammation, cellular metabolism, and stromal architecture. However, whether GLP-1RAs consistently promote an antitumor microenvironment remains uncertain, and emerging data suggest that their effects may differ substantially across tumor types. This review examines how GLP-1RAs may reshape the tumor microenvironment and explores the potential implications for tumor progression and therapeutic response.

METHODS

A focused narrative review of contemporary literature was performed examining GLP-1 receptor signaling, GLP-1RA exposure, and the tumor microenvironment. Preclinical, translational, and available human studies were evaluated with emphasis on immune-cell composition and function, tumor-associated macrophages, T-cell and natural killer-cell activity, inflammatory signaling, extracellular matrix remodeling, and tumor metabolism. Evidence supporting both antitumor and potentially tumor-promoting effects was examined to characterize context-dependent responses across malignancies.

RESULTS

Current evidence suggests that GLP-1RAs can influence multiple components of the tumor microenvironment. Preclinical studies demonstrate modulation of cytotoxic T-cell and natural killer-cell function, macrophage polarization, inflammatory signaling, and tumor metabolic pathways. In obesity-associated pancreatic cancer models, semaglutide reduced stromal and collagen deposition and increased intratumoral T-cell infiltration, suggesting remodeling of both physical and immune components of the tumor microenvironment. Experimental papillary thyroid carcinoma models similarly demonstrated macrophage reprogramming toward an increased M1 and decreased M2 phenotype with reduced tumor growth. Conversely, emerging evidence in triple-negative breast cancer has associated GLP-1 signaling with altered macrophage-tumor interactions, mesenchymal transition, and reduced response to chemoimmunotherapy. Collectively, available evidence suggests that GLP-1R signaling may reshape immune, stromal, and metabolic components of the tumor microenvironment, with effects that vary according to tumor context.

CONCLUSION

GLP-1RAs may represent previously underrecognized modulators of the tumor microenvironment rather than exclusively metabolic therapies. Current evidence suggests effects on immune-cell function, macrophage polarization, extracellular matrix composition, inflammatory signaling, and tumor metabolism; however, the direction and magnitude of these effects appear context-dependent. As GLP-1RA use continues to expand, prospective studies incorporating tumor tissue, spatial profiling, and immune phenotyping are needed to determine whether GLP-1RA exposure influences tumor progression or therapeutic response and to identify malignancies in which these effects may be clinically relevant.

Cite: Gaxiola Albarran AP. Beyond Weight Loss: How GLP-1 Receptor Agonists May Remodel the Tumor Microenvironment. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:017.

Abstract 018

Poster

Original research

Medical students

Cardiovascular Benefit, Unequal Access: GLP-1 Receptor Agonist Therapy and Prescribing Disparities in Hispanic Patients with Diabetes and Obesity

Melissa Canales Pages, Rodrigo Ávila Barba

Universidad Anáhuac México Norte; Universidad Autónoma de Guadalajara

BACKGROUND

Type 2 diabetes and obesity-related cardiovascular disease disproportionately affect Hispanic/Latino adults in the United States. Over the past two years, semaglutide has been shown to lower cardiovascular and kidney risk in trials like SELECT, FLOW, and SOUL, and newer dual agonists such as tirzepatide and survodutide are now showing similar promise. This review examines the trial evidence for cardiovascular benefit of GLP-1 receptor agonist therapy and characterizes documented racial/ethnic disparities in prescribing and access to these medications among Hispanic patients.

METHODS

Narrative review synthesizing recent randomized controlled trial data on GLP-1 receptor agonist cardiovascular outcomes alongside retrospective cohort and pharmacoepidemiologic studies examining prescribing patterns by race and ethnicity in patients with comparable clinical indications.

FINDINGS

Trial evidence consistently demonstrates cardiovascular and renal benefit from GLP-1 receptor agonist therapy across diabetes and obesity populations. Despite this, multiple U.S. cohort studies show Hispanic patients are prescribed GLP-1 receptor agonists and SGLT2 inhibitors at lower rates than non-Hispanic White patients with similar risk profiles, a gap that persists after adjusting for insurance status and is compounded by cost and formulary barriers.

CONCLUSION

Robust evidence supports GLP-1 receptor agonists as cardiometabolic risk-reducing therapy, yet Hispanic patients face persistent, measurable barriers to accessing them. Clinician awareness, insurance advocacy, and community-level outreach are needed to close this equity gap.

Cite: Canales Pages M, Ávila Barba R. Cardiovascular Benefit, Unequal Access: GLP-1 Receptor Agonist Therapy and Prescribing Disparities in Hispanic Patients with Diabetes and Obesity. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:018.

Abstract 019

Poster

Original research

Medical students

Disproportionality Analysis of FDA Adverse Event Reporting System (FAERS) Events for Dupilumab and Mepolizumab in Patients with Chronic Rhinosinusitis with Nasal Polyps

Andres Lorenzo, Marcus Sambar, Alexander Uhlman, Kathryn A. Sullivan

Supervising author: Christopher Campbell

Orlando College of Osteopathic Medicine

BACKGROUND

Chronic rhinosinusitis with nasal polyps (CRSwNP) is a heterogeneous inflammatory disease characterized by chronic sinonasal inflammation. Pathogenesis includes upregulation of type 2 (T2) cytokines, including IL-4, IL-13, and IL-5. Dupilumab (anti-IL-4R α) and mepolizumab (anti-IL5) are FDA-approved CRSwNP biologics targeting different components of the T2 inflammatory cascade. Comparative pharmacovigilance for these two drugs is important for informing clinical decision-making.

OBJECTIVE

To characterize each signal distribution by severity, demographics, time to onset, and concomitant medication use for dupilumab and mepolizumab in CRSwNP.

METHODS

A retrospective pharmacovigilance study using FAERS data (Q1 2015–Q4 2025). Disproportionality was assessed using a six-metric framework (ROR, PRR, IC/BCPNN, EBGM/MGPS, Chi-Squared, Logistic Regression). Subgroup analyses included report type, demographic, concomitant medication, outcome, and temporal stratification. Weibull modeling assessed time-to-onset.

RESULTS

We identified 27,052 dupilumab and 1,113 mepolizumab cases. Dupilumab was associated predominantly with ocular and injection-site AEs, plus musculoskeletal (arthralgia) and olfactory (anosmia) signals. Mepolizumab showed stronger relative signals for hematologic, cardiac, and respiratory AEs. Dupilumab showed female-predominant ocular but male-predominant injection-site signals; mepolizumab showed female-predominant respiratory signals. Concurrent oral corticosteroids use amplified AE reporting more for mepolizumab than dupilumab. Weibull modeling showed early failure patterns for most AEs.

CONCLUSION

Dupilumab's side effects are broader but milder (mainly ocular/injection-site), whereas mepolizumab's are fewer but more severe (primarily respiratory, risking females and OCS users). These distinct safety profiles allow for personalized biologic choice and monitoring in CRSwNP.

Cite: Lorenzo A, Sambar M, Uhlman A, Sullivan KA. Disproportionality Analysis of FDA Adverse Event Reporting System (FAERS) Events for Dupilumab and Mepolizumab in Patients with Chronic Rhinosinusitis with Nasal Polyps. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:019.

Abstract 020

Poster

Original research

Medical students

Elevated Risk, Delayed Recognition: Diagnostic Delays in Autism Spectrum Disorder Among Hispanic/Latino Children

Melissa Canales Pages, Ana Paula Gaxiola Albarran

Universidad Anáhuac México Norte

BACKGROUND

Autism spectrum disorder (ASD) affects children across all racial and ethnic groups, but Hispanic/Latino children in the United States are consistently diagnosed later than non-Latino White children, often after critical early-intervention windows have narrowed. Pediatricians are also less likely to flag Hispanic/Latino children as at-risk for ASD during routine developmental screening, and families report distinct barriers throughout the diagnostic pathway. This review examines the evidence on diagnostic delay, screening and identification gaps, and parent-reported barriers to ASD diagnosis among Hispanic/Latino children.

METHODS

Narrative review of pediatric and developmental-behavioral literature on ASD diagnosis in Hispanic/Latino children, including studies on pediatrician identification of at-risk children, comparative diagnosis and treatment patterns between Latino and non-Latino White families, and qualitative research on parent-reported barriers to diagnosis and care.

FINDINGS

Hispanic/Latino children are diagnosed with ASD at older ages than non-Latino White children and are less often identified as at-risk by pediatricians during routine screening, despite comparable underlying prevalence. Parent-reported barriers include language discordance with providers, limited culturally adapted screening tools, lower rates of referral to specialty evaluation, and immigration-related concerns that delay families from seeking care. These barriers compound across the diagnostic pathway, from initial screening through specialist referral.

CONCLUSION

Hispanic/Latino children face a multi-point diagnostic delay in ASD identification, driven by gaps in pediatrician screening accuracy and structural barriers to specialty care. Culturally and linguistically adapted screening tools, provider training, and improved referral pathways are needed to close this gap and expand access to early intervention.

Cite: Canales Pages M, Gaxiola Albarran AP. Elevated Risk, Delayed Recognition: Diagnostic Delays in Autism Spectrum Disorder Among Hispanic/Latino Children. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:020.

Abstract 021

★ Best Research Abstract — Medical Students

Poster

Literature review

Medical students

Exploring the Disconnect Between Lipoprotein(a) Reduction and Cardiovascular Outcomes in the Lp(a)HORIZON Trial

Rodrigo Ávila Barba, Sofía Alexia Sánchez Ávila, Becky Saba Assolin, Juan Pablo Ávila Barba, Maria Yvonne Herrera Ochoa

BACKGROUND

Lipoprotein(a) or Lp(a) is a genetically determined risk factor for atherosclerotic cardiovascular disease; it has the structure of a low density protein with an apolipoprotein(a) covalently bound to apolipoprotein B-100. The Lp(a) HORIZON is an ongoing trial that is testing if lowering the Lp(a) with the antisense oligonucleotide, Pelacarsen, would translate into fewer cardiovascular events.

METHODS

A literary review was conducted, we first reviewed the Design and Rationale of Lp(a)HORIZON trial. Subsequently we analyzed the topline results that were published in September 2026 through Ionis and Novartis. Afterwards, we investigated the Lp(a) evidence base that included an overview of the protein with its clinical implications, Mendelian randomization studies, completed PCSK9 inhibitor and niacin trials and other ongoing and concluded RNA based Lp(a) lowering trials.

RESULTS

Lp(a) HORIZON enrolled 8,323 patients with established ASCVD and Lp(a) >70mg/dL (median 108.3mg/dL) randomized to monthly pelacarsen 80mg or placebo. Per September 2026, the trial lowered Lp(a) but did not meet their primary endpoint; a four-component composite of cardiovascular death, nonfatal myocardial infarction, nonfatal stroke, and urgent hospitalized coronary revascularization. Acknowledging that Lp(a) lowering did not translate into a demonstrated reduction in cardiovascular risk. Seven distinct non mutually exclusive mechanisms warrant review: delayed therapeutic initiation, limited duration of exposure, failure to attain the absolute Lp(a) reduction of approximately 100 mg/dL implied by Mendelian randomization, the divergence between life-long genetic elevation and transient therapeutic lowering, unaddressed baseline cardiovascular risk, attenuation of effect within a broad composite outcome, and potential heterogeneity across patient subgroups.

DISCUSSION AND CONCLUSION

Lp(a) is an independent, easily measured, and underused risk factor for premature CAD. The Lp(a)HORIZON trial illustrates the gap between successfully modifying a validated risk biomarker and demonstrating patient-important clinical benefit; it does not, by itself, refute the causal role of Lp(a) in atherosclerotic disease. Definitive interpretation requires the full dataset and corroboration from the ongoing Lp(a) HORIZON (Novartis) and lepodisiran (ACCLAIM-Lp(a)) outcomes trials.

Cite: Ávila Barba R, Sánchez Ávila SA, Saba Assolin B, Ávila Barba JP, Herrera Ochoa MY. Exploring the Disconnect Between Lipoprotein(a) Reduction and Cardiovascular Outcomes in the Lp(a)HORIZON Trial. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:021.

Abstract 022

Poster

Public health project

Medical students

From Above and Below: How Cancer Risk Perception from Sun and Seafood Consumption Impacts Preventive Care Utilization

Isabella Lopez, D. J. McManus, A. Albertini-Fleurant, Arantxa del Campo, J. Ortiz Gonzalez, A. Peddada, A. Wells, C. Macdonald, J. Wester, Kilan C. Ashad-Bishop

University of Miami

BACKGROUND

Urban fishers are uniquely vulnerable to intersecting threats that pattern increased cancer risk and poor prognosis, specifically prolonged ultraviolet radiation (UVR) exposure from increasingly frequent extreme heat days and heightened exposure to carcinogenic environmental contaminants through seafood consumption. We conducted a mixed-methods investigation to understand how perception of UVR and heavy metal exposure risk, both alone and in combination, informs sun-protective behaviors (SPBs), preventive care utilization, and skin cancer (SC) screening adherence.

METHODS

Semi-structured interviews were conducted in English, Spanish, and Haitian Kreyol among near-shore urban fishers in Miami-Dade County, Florida's largest coastal county by population. Survey questionnaires asked approximately 35 multiple-choice, true/false, and Likertscale questions covering sociodemographic traits, fishing motivations and practices, UVR and heavy metal risk perception, and frequency and purpose of preventive care utilization. Interview data and corresponding field notes were analyzed using rapid qualitative methodology to identify emergent themes.

RESULTS

We found that urban fishers rely on lived experiences and years of accumulated fishing expertise rather than expert opinion for best practices regarding UVR exposure and SC prevention. Despite excessive UVR exposure, participants reported insufficient and inconsistent SPBs and lack of adherence to SC screening recommendations. Further, participants expressed little concern about cancer risk patterned by seafood consumption, thus no impact was reported on healthcare utilization or screening adherence.

DISCUSSION AND CONCLUSION

We found poor evidence of adoption of sun-protective behaviors and inconsistent preventive care utilization, including SC screening. Despite elevated, intersecting health risks among recreational fishers, there is limited research examining the influence of risk perception of carcinogenic exposures on cancer-related health protective behaviors among this population. Awareness of the multifactorial nature of health risks among urban fishers provides a critical foundation to improve SPBs, preventive healthcare utilization, cancer screening adherence among this high-risk population.

Cite: Lopez I, McManus DJ, Albertini-Fleurant A, et al. From Above and Below: How Cancer Risk Perception from Sun and Seafood Consumption Impacts Preventive Care Utilization. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:022.

Abstract 023

Poster

Public health project

Medical students

Hormonal Contraception and the Eye: Does Contraceptive Choice Matter for Retinal Vascular Risk?

Laura Sofia Morales Contreras, Lilian Balderas Jordan

Universidad Anáhuac México Norte; Universidad Anáhuac Puebla

BACKGROUND

Hormonal contraception is used by millions of women of reproductive age, but counseling usually focuses on pregnancy prevention and well-known cardiovascular and thrombotic risks. Ocular vascular complications are uncommon and may receive less attention during contraceptive counseling. Retinal vascular occlusion can cause significant visual impairment, making it important to understand whether different hormonal contraceptive methods carry different levels of ocular risk.

METHODS

We conducted a focused review of recent epidemiologic and ophthalmologic literature examining hormonal contraception and retinal vascular outcomes. We compared findings according to contraceptive formulation, estrogen dose, and route of administration. We also reviewed evidence regarding retinal microvascular changes detected with optical coherence tomography angiography and considered clinical factors that may modify vascular risk.

RESULTS

Recent population-level evidence suggests an association between hormonal contraception and retinal vein occlusion, although the absolute risk remains low. A nationwide cohort of more than 2.2 million women aged 15–49 years found a 40% higher rate of retinal vein occlusion among current hormonal contraceptive users compared with non-users. The association was more evident among users of combined oral contraceptives containing 30–40 µg of estrogen, while no increased rate was observed with 20 µg combined oral contraceptives or hormonal intrauterine devices. No significant increase was found for retinal artery occlusion. Separate retinal imaging research has found mostly minimal differences in retinal microvascular measurements among hormonal contraceptive users, suggesting that measurable retinal changes may be subtle.

DISCUSSION & CONCLUSION

Ocular vascular complications associated with hormonal contraception appear to be uncommon, but available evidence suggests that contraceptive formulation may influence retinal vascular risk. These findings do not suggest that hormonal contraception should generally be avoided; rather, they support individualized counseling for women with additional vascular risk factors. A history of hypertension, smoking, migraine, diabetes, thrombophilia, or previous thrombotic disease may be particularly relevant when selecting a contraceptive method. Greater collaboration between obstetrics and gynecology and ophthalmology could improve recognition of uncommon ocular complications and help patients make informed contraceptive decisions. Further longitudinal research is needed to clarify which patients are most susceptible and whether retinal imaging has a role in future risk assessment.

Cite: Morales Contreras LS, Balderas Jordan L. Hormonal Contraception and the Eye: Does Contraceptive Choice Matter for Retinal Vascular Risk?. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:023.

Abstract 024

Poster

Original research

Medical students

Racial and Ethnic Differences in Infertility Care Utilization Among Women with Infertility in the United States: A Nationally Representative Analysis of the 2022–2023 National Survey of Family Growth

Valentina Karam Acosta, Alina Feldman Unzek, Maria Jimena Barroso Alverde, Karla Camila Morales Zamora

Universidad Anáhuac México

BACKGROUND

Racial and ethnic minority populations remain underrepresented in obstetric and gynecologic clinical research, particularly in reproductive endocrinology and infertility studies. This limits the ability to characterize potential disparities in access to infertility care. Nationally representative survey data provide an opportunity to compare infertility-care utilization across racial and ethnic groups. Prior studies have documented suboptimal racial and ethnic representation in OB-GYN research, with reproductive endocrinology and infertility studies demonstrating especially low Hispanic representation. This study aimed to compare infertility-care utilization among Hispanic, non-Hispanic White and non-Hispanic Black women classified as infertile in the 2022–2023 National Survey of Family Growth (NSFG).

METHODS

We performed a secondary cross-sectional analysis of the 2022–2023 NSFG, Female Respondent File. Women classified as infertile by the NSFG were included, and analyses were restricted to Hispanic, non-Hispanic White, and non-Hispanic Black respondents. Infertility-care utilization was defined as ever receiving medical help to become pregnant. Given the complex survey design, weights, strata, and clusters were incorporated to calculate weighted proportions and 95% confidence intervals using Taylor series linearization. Overall differences were assessed by a survey-adjusted Wald F test, with a secondary pairwise Wald contrast comparing Hispanic and non-Hispanic White women.

RESULTS

The analytic sample included 181 women: 65 Hispanic, 98 non-Hispanic White, and 18 non-Hispanic Black. Weighted infertility-care utilization was 26.4% (95% CI, 14.1%–38.7%) among Hispanic women, 39.3% (95% CI, 26.8%–51.7%) among non-Hispanic White women, and 25.4% (95% CI, 2.2%–48.6%) among non-Hispanic Black women. Overall differences were not statistically significant ($F=1.17$; $p=0.317$). Non-Hispanic White women had an estimated 12.9-percentage-point higher utilization than Hispanic women (95% CI, -4.9 to 30.6; $p=0.152$).

DISCUSSION & CONCLUSION

Infertility-care utilization was descriptively lower among Hispanic and non-Hispanic Black women than among non-Hispanic White women, although differences were not statistically significant. Wide confidence intervals, particularly among non-Hispanic Black women, reflect limited precision due to small subgroup sample sizes in reproductive health. These findings underscore the importance of adequately powered racial and ethnic subgroup analyses when evaluating access and utilization of reproductive health services. Without sufficient representation and subgroup-specific data, clinically meaningful disparities in infertility care may remain undetected, limiting efforts to identify and address barriers to equitable reproductive care.

Cite: Karam Acosta V, Feldman Unzek A, Barroso Alverde MJ, Morales Zamora KC. Racial and Ethnic Differences in Infertility Care Utilization Among Women with Infertility in the United States: A Nationally Representative Analysis of the 2022–2023 National Survey of Family Growth. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:024.

Abstract 025

Poster

Original research

Medical students

Six-week changes in follicle-stimulating hormone following individualized subcutaneous hormone pellet therapy in postmenopausal women: a retrospective study

Angeles Astrid Zamudio Fuentes, [Laura Sofia Morales Contreras](#)

Universidad Anáhuac México Norte; Universidad de Monterrey

BACKGROUND

Menopausal symptoms can substantially affect quality of life, and hormone therapy is an established treatment option for appropriate patients. Subcutaneous hormone pellets provide sustained delivery of estradiol and testosterone; however, evidence regarding short-term biochemical responses to individualized pellet therapy remains limited. This study evaluated changes in serum follicle-stimulating hormone (FSH) following individualized subcutaneous hormone pellet therapy.

METHODS

We conducted a retrospective chart review of 51 women with paired serum FSH measurements obtained before and approximately six weeks after individualized subcutaneous hormone pellet therapy at a private gynecology practice. The primary outcome was change in serum FSH from baseline to follow-up. Secondary outcomes included the proportion of patients with any decrease in FSH and the proportion achieving a $\geq 50\%$ reduction from baseline. Patient-reported symptoms documented in the medical record were reviewed descriptively but were not analyzed as standardized efficacy endpoints. Paired FSH measurements were evaluated using paired statistical testing.

RESULTS

Mean serum FSH decreased from 59.7 ± 30.6 mIU/mL at baseline to 33.6 ± 22.1 mIU/mL at follow-up, corresponding to a mean absolute decrease of 26.0 mIU/mL ($p < 0.001$). FSH decreased in 45 of 51 patients (88.2%), remained unchanged in 1 (2.0%), and increased in 5 (9.8%). A $\geq 50\%$ reduction from baseline occurred in 26 patients (51.0%). Clinical records documented changes in menopausal symptoms, energy, libido, hot flashes, sleep, weight, and other symptoms; however, these observations were not collected using a standardized symptom instrument and were therefore not analyzed quantitatively.

DISCUSSION & CONCLUSION

Individualized subcutaneous hormone pellet therapy was associated with a significant reduction in serum FSH over approximately six weeks, although biochemical responses varied among patients. These findings describe a short-term biochemical response and should not be interpreted as evidence that FSH reduction represents clinical efficacy. The retrospective design, absence of a comparator group, heterogeneous dosing, short follow-up, and nonstandardized symptom documentation limit causal inference. Prospective controlled studies incorporating standardized clinical outcomes and longer follow-up are needed to determine whether biochemical changes correspond to meaningful clinical improvement.

Cite: Zamudio Fuentes AA, Morales Contreras LS. Six-week changes in follicle-stimulating hormone following individualized subcutaneous hormone pellet therapy in postmenopausal women: a retrospective study. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:025.

Abstract 026

Poster

Literature review

Medical students

Suzetrigine as an Alternative to Opioids in Oncologic Pain Management

Lucía de la Mora Vargas, Ana Paula Gaxiola Albarran, Melissa Canales Pages

BACKGROUND

Pain affects about 55% of patients during anticancer treatment and 66% of those with advanced or metastatic disease. Opioids remain the backbone of treatment, but constipation, sedation, delirium, respiratory depression, and misuse risk limit their use. Suzetrigine (JOURNAVX®) is a first-in-class, selective Nav1.8 sodium channel inhibitor. It was approved by the US FDA in January 2025 for moderate-to-severe acute pain in adults. Nav1.8 is expressed almost exclusively in peripheral nociceptors, so suzetrigine blocks pain signaling without the central effects of opioids. Its role in cancer patients has not been defined.

OBJECTIVES

To summarize the mechanistic rationale and the clinical evidence for suzetrigine, and to identify realistic uses, safety concerns, and research priorities in oncologic pain management.

METHODS

In January 2025, the US FDA approved suzetrigine for moderate-to-severe acute pain in adults. The dose is 100 mg, then 50 mg every 12 hours, for up to 14 days. In two phase 3 trials after abdominoplasty and bunionectomy (more than 2,000 patients), suzetrigine was superior to placebo but not to hydrocodone/acetaminophen, and caused less nausea and vomiting. In a phase 2 trial in lumbosacral radiculopathy, suzetrigine did not separate from placebo. In cancer, the only clinical report is a case series of three opioid-tolerant men with spinal metastases. None had meaningful relief, and none had adverse effects. Its most plausible role in oncology is perioperative pain after cancer surgery, such as mastectomy, thoracotomy, or skin cancer excision, as part of a multimodal opioid-sparing regimen. A trial after skin cancer surgery is already registered. Short procedural pain, such as bone marrow biopsy or port placement, could be another use. Knocking down Nav1.8 reduced pain in a rat bone cancer model, but neuropathy after chemotherapy involves oxidative stress, neuroinflammation, and central sensitization, which a sodium channel blocker alone is unlikely to overcome. Several safety precautions matter in cancer patients. Suzetrigine is metabolized by CYP3A. It is contraindicated with strong CYP3A inhibitors, including the azole antifungals often used in hematologic malignancies. Strong or moderate inducers such as enzalutamide, apalutamide, carbamazepine, and rifampin can reduce its effect. It should be avoided in severe hepatic impairment and when eGFR is below 15 mL/min. The most common adverse effects are pruritus, muscle spasms, rash, and elevated creatine kinase.

CONCLUSIONS

Before suzetrigine can be recommended in oncology, randomized trials are needed. They should start with perioperative settings in cancer surgery and should measure pain scores, opioid consumption, and persistent postsurgical pain. Later studies should look at neuropathic cancer pain, stratified by pain phenotype, chemotherapy class, and opioid exposure. Long-term safety and interactions with anticancer drugs also need study. If these trials are positive, suzetrigine could reduce opioid exposure in cancer patients, particularly survivors and patients undergoing surgery. It would not replace opioids in advanced cancer pain, but it could add a non-sedating, non-addictive option to multimodal care that targets pain at its peripheral source.

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Cite: de la Mora Vargas L, Gaxiola Albarran AP, Canales Pages M. Suzetrigine as an Alternative to Opioids in Oncologic Pain Management. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:026.

Abstract 027

Poster

Original research

Medical students

The Impact of Student-Led Ophthalmic Dissections on Medical Student Confidence and Specialty Interest

Rebecca Menendez

Supervising author: Emily Bradshaw

University of Central Florida College of Medicine

BACKGROUND

Medical students interested in surgical specialties such as ophthalmology may have limited opportunities for hands-on ophthalmic anatomy education within structured anatomy curriculum. Near-peer teaching (NPT) may provide an accessible approach to supplementing traditional anatomy education while promoting collaborative learning and specialty exposure. This study evaluated the impact of a student-led ophthalmic dissection integrating clinical vignettes on medical students' self-reported anatomical knowledge, learning experience, and interest in ophthalmology.

METHODS

Second-year medical students participated in an optional ophthalmic dissection led by student members of the Ophthalmology Interest Group. The session consisted of a clinical case-based prebrief, hands-on dissection of ophthalmic structures guided by near-peer instruction, and a post-dissection debrief. Participants completed pre- and post-intervention surveys assessing self-reported knowledge of general eye anatomy, orbital anatomy, ocular muscles, innervation, and vasculature using 5-point Likert scales. The post-survey additionally assessed satisfaction with the near-peer learning environment, clinical integration, perceived ease of organizing anatomical information, and ophthalmology interest. Matched pre- and post-intervention responses were analyzed using Wilcoxon signed-rank tests.

RESULTS

Seventeen students completed matched pre- and post-intervention surveys. Mean overall self-reported anatomical knowledge increased from 1.82 to 3.38 on a 5-point scale ($p < 0.001$). Significant improvements were observed in general eye anatomy (2.06 vs. 3.47, $p = 0.001$), orbital anatomy (1.71 vs. 3.29, $p < 0.001$), ocular muscle anatomy (1.76 vs. 3.65, $p < 0.001$), ocular innervation (2.12 vs. 3.47, $p = 0.002$), and ocular vasculature (1.47 vs. 3.00, $p < 0.001$). All participants agreed or strongly agreed that the student-led format fostered a productive learning environment, that hands-on dissection simplified difficult concepts, and that they would recommend the experience to other students. Nine participants (53%) agreed or strongly agreed that they gained new interest in ophthalmology following the session.

DISCUSSION AND CONCLUSION

A clinically integrated, near-peer ophthalmic dissection was associated with significant improvements in perceived anatomical knowledge and high student satisfaction. The universal improvement in self-reported ocular muscle knowledge suggests that hands-on instruction may be particularly beneficial for spatially complex anatomical relationships. Participants also reported high perceived ease of mentally organizing the material, supporting the potential value of integrating clinical context with dissection. These findings suggest that NPT may be a feasible supplement to traditional anatomy education while providing early exposure to ophthalmology. Given the small, self-selected cohort and reliance on self-reported outcomes, future studies should incorporate objective knowledge assessments, larger samples, and validated measures of cognitive workload.

Cite: Menendez R. The Impact of Student-Led Ophthalmic Dissections on Medical Student Confidence and Specialty Interest. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:027.

Abstract 028

Poster

Case report

Residents & fellows

A Case of PCI-Associated MRSA Aortitis Complicated by Aortic Rupture

Jennifer Fuller, Shiwangi Mishra, Raquel Diaz, Juan Criollo

Palmetto General Hospital

INTRODUCTION

Infectious aortitis is a rare but life-threatening condition with highly non-specific symptoms, often leading to delayed diagnosis and increased morbidity and mortality. Most commonly associated with immunocompromised states, intravenous drug use, and recent intravascular interventions. The reported incidence of infectious aortitis ranges from 0.6–3%, with *Staphylococcus aureus* accounting for up to 28% of cases. Methicillin-resistant *Staphylococcus aureus* (MRSA)-associated aortitis carries particularly high mortality rates, reported between 15–50%, especially when diagnosis and definitive management are delayed.

CASE: A 77-year-old male with a past medical history of hypertension, diabetes mellitus, prostatic hyperplasia, and coronary artery disease status post recent percutaneous coronary intervention (PCI) to the left anterior descending artery presented with 5 days of abdominal pain, nausea, vomiting, dysuria, melena, and altered mental status. Hemodynamically stable initially. Computed tomography (CT) of the abdomen and pelvis revealed a 7.6 × 5.6 × 5.5 cm retroperitoneal conglomerate nodal mass encircling the abdominal aorta, raising concern for malignancy. The patient was admitted to the intensive care unit, and fine-needle aspiration of the mass was negative for malignancy. Blood cultures repeatedly grew MRSA, and the patient was diagnosed with MRSA infectious aortitis and started on daptomycin. The patient underwent exploratory laparotomy with retroperitoneal lymph node biopsies, which demonstrated microabscess formation and increased plasma cells within peri-aortic lymph nodes, consistent with an infectious process. Despite medical therapy, the patient acutely decompensated with worsening tachycardia and hemodynamic instability. Computed tomography angiography of the aorta demonstrated acute abdominal aortic rupture at the level of the renal arteries with surrounding retroperitoneal hemorrhage involving approximately 5 cm of the abdominal aorta. Both renal arteries maintained perfusion. The case was discussed urgently with a multidisciplinary team, and the patient was transferred to a tertiary care center for emergent vascular surgical intervention.

DISCUSSION

Infectious (mycotic) aortitis results from bacterial seeding of the arterial wall, often facilitated by bacteremia following intravascular procedures such as PCI. In this case, recent coronary intervention likely served as the nidus for infection. Persistent MRSA bacteremia suggests biofilm-mediated infection, highlighting the limitations of antibiotic therapy alone. Colonization of the vasa vasorum is favored in large-caliber vessels such as the aorta due to slower blood flow, allowing progressive arterial wall destruction and aneurysm formation. This case underscores the importance of early recognition, source control, and timely surgical intervention, as delayed diagnosis is associated with catastrophic complications and high mortality. With the increasing reliance on percutaneous vascular procedures, awareness of infectious aortitis as a rare but fatal complication is critical, particularly in high-risk patient populations.

CONCLUSIONS

MRSA infectious aortitis is a rare but highly lethal condition, particularly in high-risk patients. Recent PCI may serve as a nidus for MRSA aortic infection. Antibiotic therapy alone may be insufficient due to persistent bacteremia and biofilm formation.

Cite: Fuller J, Mishra S, Diaz R, Criollo J. A Case of PCI-Associated MRSA Aortitis Complicated by Aortic Rupture. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:028.

Abstract 029

Poster

Case report

Residents & fellows

Dissociative Identity or Psychosis? The Role of Longitudinal History, Collateral, and Documentation in a Patient Reporting Multiple Identities

Priamo Alexis Pichardo Gonzalez, Monica C. Correa-Alfonzo, Shayaan Ahmed

University of Central Florida College of Medicine / HCA Healthcare GME Consortium

BACKGROUND

Dissociative and psychotic disorders may share features including voice-hearing, disturbances in sense of self, unusual beliefs, and alterations in perceived control, creating diagnostic uncertainty when patients report multiple identities. Named identities or plural self-reference alone do not establish dissociative identity disorder (DID), while unusual identity experiences should not automatically be attributed to psychosis. This case highlights the importance of longitudinal assessment and collateral history when a patient's interpretation of symptoms differs from the observed clinical course.

CASE PRESENTATION

A patient with a complex psychiatric history and recurrent hospitalizations reported approximately 35 identities, frequently used plural pronouns, described a twin sharing her body since birth, and reported multiple identities being simultaneously "in control," "co-occurring," and "conflicting." She strongly identified these experiences as DID, rejected a schizophrenia diagnosis, demonstrated limited insight, and resisted antipsychotic treatment. Mental status examinations demonstrated paranoia, unusual thought content, circumstantial and intermittently disorganized thinking, impaired judgment, decreased self-care, and impaired recall of a recent hospitalization. The chart included diagnoses of DID, bipolar I disorder with psychotic features, borderline personality disorder, and autism, while the treatment team considered an underlying primary psychotic-spectrum disorder.

FINDINGS

Collateral history revealed a significant discrepancy in symptom chronology. The patient's mother reported a psychiatric decompensation in 2020 associated with aggression and a subsequent schizophrenia diagnosis, whereas the multiple-identity phenomenon reportedly emerged only six months before the recent hospitalizations. This period coincided with medication nonadherence, disengagement from psychiatric care, isolation, aggression, family mistrust, and functional deterioration. Across subsequent admissions, the patient continued to describe an elaborate identity system while demonstrating unusual thought content, limited insight, impaired interpersonal boundaries, and resistance to antipsychotic treatment.

DISCUSSION & CONCLUSION

This case illustrates the difficulty of differentiating dissociative phenomena from psychotic-spectrum illness based on symptom terminology alone. Multiple identities, plural self-reference, voice-hearing, and alterations in perceived control require assessment of identity discontinuity, dissociative amnesia, trauma history, reality testing, thought organization, functional decline, and longitudinal treatment response. Collateral evidence suggesting that psychotic illness preceded the reported multiple-identity phenomenon broadened the diagnostic formulation. Limitations include incomplete longitudinal records and insufficient characterization of dissociative symptoms and treatment response. Complex identity-related experiences should be evaluated according to their underlying phenomenology rather than terminology alone. Longitudinal history, collateral information, and prior documentation are essential to avoid diagnostic anchoring and maintain an appropriately broad differential.

Cite: Pichardo Gonzalez PA, Correa-Alfonzo MC, Ahmed S. Dissociative Identity or Psychosis? The Role of Longitudinal History, Collateral, and Documentation in a Patient Reporting Multiple Identities. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:029.

Abstract 030

Poster

Case report

Residents & fellows

Duty to the Patient. Duty to the Public. Duty under the Law

Aida Sarita Gonzalez, Sujay Kamissety, Nishant K. Nerella, Joseph Maslak

HCA Florida Citrus Hospital

BACKGROUND

Mobitz type II atrioventricular (AV) block is a high-risk conduction abnormality with potential progression to complete heart block, syncope, and sudden cardiac death. Management becomes particularly challenging when a patient refuses recommended care despite substantial risk of serious harm. Such cases require clinicians to balance respect for patient autonomy with the duty to prevent harm, while also considering public safety and applicable legal requirements.

CASE PRESENTATION

A male patient with recurrent syncope presented with symptomatic bradycardia and 2:1 AV conduction consistent with Mobitz type II AV block. Given the risk of progression to complete heart block and recurrent syncope, urgent permanent pacing was recommended. Despite extensive counseling regarding the risk of sudden deterioration, injury, and death, the patient initially declined intervention and left the emergency department against medical advice. Because recurrent syncope and significant bradyarrhythmia posed a potential risk to the patient and others if he continued driving, the care team evaluated his decision-making capacity, provided detailed counseling regarding the risks of refusing treatment and driving, and addressed concerns regarding medically unsafe driving in accordance with applicable Florida law. The patient subsequently returned for continued care and underwent permanent pacemaker implantation without reported complication.

FINDINGS

This case demonstrates the clinical and ethical complexity of symptomatic high-grade conduction disease when a patient initially refuses definitive therapy. The patient's recurrent syncope, symptomatic bradycardia, and 2:1 Mobitz type II AV block represented a substantial risk for progression to complete heart block and sudden cardiac death. Assessment of decision-making capacity was essential to distinguish an informed refusal from refusal occurring in the setting of impaired capacity. Following further counseling and return to care, permanent pacemaker placement provided definitive treatment and reduced the immediate risk associated with the conduction abnormality.

DISCUSSION & CONCLUSION

Symptomatic Mobitz type II AV block warrants urgent evaluation for permanent pacing because of the risk of progression to complete heart block and serious adverse outcomes. When patients refuse potentially lifesaving treatment, clinicians must respect autonomy while carefully assessing decision-making capacity, communicating risks and alternatives, documenting informed refusal, and taking reasonable steps to reduce preventable harm. Driving restrictions and reporting obligations introduce an additional public-safety dimension that varies by jurisdiction. In Florida, applicable statutes provide legal frameworks addressing emergency treatment and confidential reporting of medically unsafe drivers. This case emphasizes that management of life-threatening bradyarrhythmias extends beyond the clinical indication for pacing and requires integration of evidence-based cardiology, ethical principles, capacity assessment, clear documentation, and state-specific legal considerations.

Cite: Gonzalez AS, Kamissety S, Nerella NK, Maslak J. Duty to the Patient. Duty to the Public. Duty under the Law. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:030.

Abstract 031

Poster

Case report

Residents & fellows

Early Inotrope Assisted Diuresis in Acute Decompensated Heart Failure: A Case Report

Juan Felipe Jimenez Trujillo, Luisa Valentina Ramírez Zuluaga, Pedro L. Jimenez G.

Mount Sinai Medical Center

BACKGROUND

Acute decompensated heart failure (ADHF) complicated by borderline or low systolic blood pressure (SBP) frequently limits titration of loop diuretics, resulting in incomplete decongestion. Intravenous inotropes are used to augment cardiac output and support diuretic delivery in this setting, though evidence for their benefit is heterogeneous and etiology-dependent.

CASE PRESENTATION

A 71-year-old man with ischemic cardiomyopathy and HFrEF (LVEF 25–30%), CKD, paroxysmal atrial fibrillation status post MAZE procedure and left atrial appendage ligation, and sick sinus syndrome with pacemaker placement and ascending aortic aneurysm status post hemiarch replacement presented with progressive exertional dyspnea, orthopnea, and paroxysmal nocturnal dyspnea. On admission, blood pressure was 106/77 mmHg, NT-proBNP 7,547 pg/mL, and chest radiography demonstrated pulmonary vascular congestion and edema. Echocardiography showed LVEF of 25–30%, right ventricular dysfunction, and moderate functional mitral and tricuspid regurgitation.

Intravenous furosemide was initiated for decongestion; however, persistent volume overload was accompanied by progressive hypotension, with SBP falling into the 80s and limiting further diuretic escalation and GDMT. Despite hypotension, he remained warm and without clinical or biochemical evidence of hypoperfusion or cardiogenic shock, with normal lactate levels. On hospital day 2, blood pressure declined to 71/50 – 87/54 mmHg, prompting transfer to the cardiac intensive care unit for inotrope-assisted decongestion. Milrinone was initiated at 0.125 µg/kg/min, allowing escalation of furosemide to 40 mg IV twice daily. Over the following two days of milrinone-assisted diuresis, net fluid balances of approximately -1.5 L and -1.1 L were achieved without evidence of hypoperfusion. Spironolactone 12.5 mg daily was added, and milrinone was successfully discontinued on day 3 in the CCU. The patient remained stable off inotropic support and was discharged euvoletic on furosemide 40 mg twice daily and spironolactone 12.5 mg daily. Persistent hypotension precluded initiation of metoprolol and ACEi/ARB/ARNI therapy; further GDMT optimization was deferred to the outpatient setting with Advanced Heart Failure follow-up.

FINDINGS

In a patient with ADHF, persistent congestion and low-output physiology, progressive hypotension limited adequate diuresis despite a warm-and-wet profile without overt cardiogenic shock. Short-term milrinone (0.125 µg/kg/min) provided hemodynamic support, allowing continued IV diuresis and net negative fluid balances up to 1.5 L with successful decongestion. Milrinone was discontinued after two days, and the patient remained stable off inotropic support. This case supports a potential role for individualized, short-term inotrope-assisted decongestion when fluid removal is limited by hypotension and low-output physiology.

DISCUSSION & CONCLUSION

This case highlights a common inpatient dilemma in advanced HFrEF: the need for aggressive decongestion when low-normal blood pressure limits diuretic escalation and results in stalled fluid removal. Inotrope-assisted diuresis may augment cardiac output and renal perfusion, allowing more consistent diuretic dosing when hypotension limits conventional therapy. This case supports individualized, short-term inotrope-assisted decongestion in HFrEF patients whose fluid removal is objectively limited by hypotension.

Cite: Jimenez Trujillo JF, Ramírez Zuluaga LV, Jimenez G. PL. Early Inotrope Assisted Diuresis in Acute Decompensated Heart Failure: A Case Report. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:031.

Abstract 032

Poster

Case report

Residents & fellows

Iatrogenic Over-replacement Thyrotoxicosis Induced DKA

Samuel Chavez Herrera, Muneeza Rashid, Sangho Hyun, Tomilya Thompson

Supervising author: Luis Daniel Lugo

Lakeland Regional Health

BACKGROUND

Diabetic ketoacidosis (DKA) in established type 1 diabetes mellitus (T1DM) is commonly precipitated by insulin omission or infection. When no clear trigger is identified, alternative causes merit consideration. Thyrotoxicosis can exacerbate hyperglycemia; increased hepatic glucose production, insulin degradation and lipolysis. Insulin-pump therapy also carries increased DKA risk when delivery is interrupted due of limited subcutaneous insulin reserves. This case highlights two distinct DKA episodes associated with iatrogenic thyrotoxicosis and insulin-pump failure.

CASE PRESENTATION

A 78-year-old woman with T1DM managed by insulin pump, coronary artery disease (CAD), hypothyroidism and peripheral arterial disease presented with a pump “high” alarm (fingerstick 542 mg/dL), nausea, vomiting, and acute substernal chest pain radiating to both shoulders. Despite crystalloid administration, her blood pressure declined from 130s/80s to 90s/40s. Laboratory evaluation confirmed DKA (glucose 547 mg/dL, anion gap 19, venous pH 7.23, bicarbonate 18 mmol/L, beta-hydroxybutyrate 42.6 mg/dL, serum osmolality 325 mOsm/kg, and 3+ urine ketones), accompanied by hypotension, worsening lactic acidosis (2.7 to 4.2 mmol/L), and mild troponin elevation (28 to 32 ng/L) with nonspecific ST changes. CT angiography excluded pulmonary embolism. Review of a hospitalization one month earlier revealed a TSH of 66.3. Without medication reconciliation, clinicians presumed inadequate replacement and increased levothyroxine from 137 to 175 mcg. Pharmacy records subsequently confirmed she had not filled levothyroxine for four months. After one month of adherence to the increased dose, she developed biochemical thyrotoxicosis (TSH 0.02, free T4 2.29) and presented with DKA. She was admitted to the ICU.

FINDINGS

DKA resolved with intravenous insulin and fluids, and hypotension resolved without vasopressors. No alternative precipitant was identified; the clinical timeline supported iatrogenic thyrotoxicosis as the cause of the initial DKA. Echocardiography showed preserved ejection fraction (50–55%). Lexiscan showed no inducible ischemia, favoring demand-related myocardial injury. HbA1c was 7.1%, consistent with relatively well-controlled baseline diabetes. Levothyroxine was held. Eight days after discharge, she was readmitted with recurrent DKA (glucose 604 mg/dL, pH 7.27, beta-hydroxybutyrate 40 mg/dL) after her pump stopped functioning when an expired Dexcom sensor could not be replaced. This episode resolved with protocol-based treatment, and she was discharged after a replacement sensor arrived.

DISCUSSION

Two preventable DKA episodes arose from distinct failures: inappropriate medication adjustment and interruption of insulin delivery due to device-access barriers. The first highlights the importance of verifying pharmacy dispensing history before modifying thyroid replacement. In older patients with CAD, levothyroxine over-replacement also increases concern for atrial fibrillation, myocardial ischemia, and heart failure. The second underscores the vulnerability of pump-dependent patients when monitoring supplies are unavailable.

CONCLUSION

Recurrent DKA in device-dependent T1DM warrants investigation beyond presumed insulin omission. Medication reconciliation, careful interpretation of thyroid function tests, evaluation for alternative precipitants, and reliable access to insulin-delivery and monitoring supplies are essential to prevention.

Cite: Chavez Herrera S, Rashid M, Hyun S, Thompson T. Iatrogenic Over-replacement Thyrotoxicosis Induced DKA. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:032.

Abstract 033

★ Best Case Report — Residents & Fellows

Poster

Case report

Residents & fellows

Metoprolol Toxicity Associated With Curcuminoid and Piperine Supplementation: A Suspected CYP2D6-Mediated Drug-Supplement Interaction

Anmol Gosai, Guillermo Gomez, Jose Torres, Jose Samuel Perez, Jordan Young

HCA Florida Trinity Hospital

BACKGROUND

Herbal and dietary supplements are widely used and may produce clinically significant drug-supplement interactions through effects on drug absorption and metabolism. Metoprolol is predominantly metabolized by hepatic cytochrome P450 2D6 (CYP2D6), and inhibition of this pathway can increase metoprolol exposure and lead to excessive β -adrenergic blockade. Curcuminoids and piperine, commonly combined in commercially available turmeric supplements, have demonstrated inhibitory effects on multiple cytochrome P450 enzymes, including CYP2D6.

CASE PRESENTATION

An 83-year-old man with paroxysmal atrial fibrillation and hypertension presented after a ground-level fall preceded by dizziness and transient loss of consciousness. He was taking metoprolol tartrate twice daily for atrial fibrillation and was subsequently found to have profound bradycardia with a heart rate of 31 beats/min. Electrocardiography demonstrated atrial fibrillation with a slow ventricular response and right bundle branch block. Intravenous atropine produced no significant improvement, and the patient required isoproterenol infusion and intensive care monitoring. Trauma evaluation revealed an acute nondisplaced C4 teardrop fracture, as well as facial trauma. Cardiac biomarkers were negative, renal function was preserved, and transthoracic echocardiography demonstrated a left ventricular ejection fraction of 60%. Detailed medication reconciliation identified concurrent use of a commercially obtained turmeric supplement containing curcuminoids and piperine. Given the known inhibitory effects of curcuminoids and piperine on drug-metabolizing CYP enzymes, particularly CYP2D6, a drug-supplement interaction was considered a potential contributor to excessive metoprolol effect. Metoprolol was withheld, with subsequent resolution of the severe bradycardia. It was later restarted at 12.5 mg twice daily without recurrence of profound bradycardia during hospitalization.

FINDINGS

The patient experienced profound symptomatic bradycardia with a heart rate of 31 beats/min, dizziness, transient loss of consciousness, and traumatic injury. Atropine produced no significant improvement, necessitating isoproterenol infusion and intensive care monitoring. Following discontinuation of metoprolol, the severe bradycardia resolved. Metoprolol was subsequently restarted at 12.5 mg twice daily without recurrence of profound bradycardia during hospitalization.

DISCUSSION & CONCLUSION

This case highlights a potentially clinically significant interaction between curcuminoid/piperine supplementation and metoprolol associated with severe symptomatic bradycardia, syncope, and traumatic injury. Although direct metoprolol serum concentrations and CYP2D6 activity were not measured, the clinical course and existing pharmacologic evidence support a plausible drug supplement interaction. Clinicians should routinely inquire about herbal and dietary supplement use when evaluating unexplained bradycardia or suspected medication toxicity, particularly in older adults receiving medications predominantly metabolized through CYP2D6.

Cite: Gosai A, Gomez G, Torres J, Perez JS, Young J. Metoprolol Toxicity Associated With Curcuminoid and Piperine Supplementation: A Suspected CYP2D6-Mediated Drug-Supplement Interaction. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:033.

Abstract 034

Poster

Case report

Residents & fellows

More Than Meets the Eye: High-Grade Neuroendocrine Carcinoma with Glandular Features of the Anorectum in a Patient with HIV

Francisco González Landrón, Ellen Si, John Iwaniec, Jacob Jernigan, Sushma Nakka

Lakeland Regional Health

BACKGROUND

Neuroendocrine carcinoma (NEC) of the colorectum can be histologically indistinguishable from poorly differentiated adenocarcinoma on routine hematoxylin and eosin staining. People with HIV carry an increased risk of HPV-associated anorectal disease, which may produce multifocal, atypical anorectal neoplasms. Because high-grade NEC is managed with a different chemotherapy backbone than conventional colorectal adenocarcinoma, accurate classification carries immediate therapeutic consequences.

CASE PRESENTATION

41-year-old male with HIV, HPV-associated perianal condylomata, and a 7-month lapse in antiretroviral therapy presented with rectal pain and bleeding, difficulty defecating, and approximately 30 pounds of weight loss. Cross-sectional imaging showed concentric rectosigmoid wall thickening with perirectal and left external iliac lymphadenopathy and multiple hypodense hepatic lesions. MRI demonstrated an ill-defined lower rectal mass extending to the anorectal junction with mesorectal fat infiltration and abutment of the anterior mesorectal fascia. Colonoscopy revealed an ulcerated, cratered mass at the anal verge with adjacent perianal warts. Initial rectal biopsy demonstrated synaptophysin and chromogranin positivity with a Ki-67 of 100%, supporting high-grade NEC. The liver biopsy showed focal CK7 positivity, CK20 negativity, and SATB2/Villin positivity, consistent with metastatic adenocarcinoma of colorectal origin. The patient received modified FOLFOX6, later with bevacizumab, and underwent diverting colostomy for obstructive symptoms. Four months later, repeat IHC of the liver specimen showed synaptophysin and chromogranin positivity, while repeat IHC of the rectal lesion showed CK7 positivity and CK20 negativity — reclassifying the liver lesion as high-grade NEC of colorectal origin. Because both lesions retained adenocarcinoma features alongside neuroendocrine findings, the regimen was not modified at reclassification, transitioning to platinum/etoposide only after an additional four months. The course was complicated by malignant hypercalcemia, hyponatremia, colostomy malfunction, and severe sepsis. Restaging showed progressive hepatic metastases, new pulmonary nodules, enlarging pelvic adenopathy, and a new neck lesion, with a CEA of 122. Given rapid progression, the patient transitioned to hospice care.

FINDINGS

The main critical finding in this case are primary and metastatic sites containing overlapping neuroendocrine and glandular features, thus delaying recognition and appropriate treatment of the correct diagnosis.

DISCUSSION & CONCLUSION

This case illustrates the diagnostic ambiguity that arises when a poorly differentiated anorectal tumor shows concurrent neuroendocrine and glandular features, raising the differential of NEC versus adenocarcinoma with neuroendocrine differentiation versus mixed neuroendocrine–non-neuroendocrine neoplasm (MiNEN). Emerging data implicate HPV in a subset of anorectal neuroendocrine and mixed neoplasms, supporting consideration of multifocal HPV-associated disease in people with HIV presenting with anal masses. Neuroendocrine and adenocarcinoma IHC of both primary and metastatic sites is essential when selecting a chemotherapy backbone. Discordant histology within a mass, or between primary and metastatic sites, should prompt component quantification alongside molecular profiling, with reclassification triggering urgent therapy reconsideration rather than deferred adjustment.

Cite: González Landrón F, Si E, Iwaniec J, Jernigan J, Nakka S. More Than Meets the Eye: High-Grade Neuroendocrine Carcinoma with Glandular Features of the Anorectum in a Patient with HIV. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:034.

Abstract 035

Poster

Case report

Residents & fellows

Postpartum Immune Modulation and Reactivation of Latent Tuberculosis: A Case of Active Pulmonary Tuberculosis

Guillermo Gomez, Jose Samuel Perez, Jose Torres, Itioye Adetula

Supervising author: Koravangala Sundaresh

HCA Florida Trinity Hospital

BACKGROUND

Tuberculosis (TB) remains an important cause of morbidity worldwide, with progression from latent tuberculosis infection (LTBI) to active disease influenced by host immune status. Pregnancy is associated with significant alterations in cell-mediated immunity, and the postpartum period is characterized by further immune modulation that may contribute to reactivation of previously contained *Mycobacterium tuberculosis*. We present a case of active pulmonary and pleural tuberculosis occurring approximately one year after childbirth in a woman with remote TB exposure in Ecuador. This case highlights the potential contribution of pregnancy-associated immune alterations to TB reactivation and the importance of maintaining clinical suspicion despite initially negative acid-fast bacilli (AFB) testing.

CASE PRESENTATION

A 28-year-old woman with remote tuberculosis exposure in Ecuador presented with one week of severe right-sided chest pain, dyspnea, cough, decreased appetite, and nightly fevers. Approximately one year earlier, following childbirth, she developed a left-sided pleural effusion concerning empyema requiring chest tube placement. Despite counseling regarding the need for further evaluation and treatment, she declined additional care. On re-presentation one year later, chest radiography demonstrated a moderate loculated right pleural effusion with right perihilar and mass-like opacities. Computed tomography of the chest revealed bilateral pulmonary nodules and multiple cavitary lesions, including a 3.4 × 2.8 cm right upper-lobe cavity, raising concern for active tuberculosis. QuantiFERON-TB testing was positive. Initial AFB smear was negative; however, *M. tuberculosis* PCR was positive, confirming active tuberculosis. Given the significant pleural and pulmonary involvement, the patient underwent bronchoscopy with bronchial washings and placement of a pigtail catheter and right chest tube for pleural drainage. She was subsequently started on standard RIPE therapy with rifampin, isoniazid, pyrazinamide, and ethambutol. Infectious Disease, Pulmonology, and the local health department coordinated ongoing treatment and follow-up.

FINDINGS

Although the initial AFB smear was negative, QuantiFERON-TB testing was positive and *M. tuberculosis* PCR confirmed active tuberculosis. The clinical and radiographic findings were consistent with active pulmonary and pleural TB. The patient was initiated on standard RIPE therapy with rifampin, isoniazid, pyrazinamide, and ethambutol for two months, followed by rifampin and isoniazid for four additional months. Infectious Disease, Pulmonology, and public health authorities coordinated treatment and outpatient follow-up.

DISCUSSION AND CONCLUSION

This case illustrates the diagnostic challenges of active TB when initial AFB smear results are negative and emphasizes the importance of integrating clinical, radiographic, immunologic, and molecular findings. The temporal relationship between childbirth, prior pleural disease, and subsequent development of cavitary pulmonary TB raises the possibility that postpartum immune modulation contributed to reactivation of previously latent *M. tuberculosis*. Although a direct causal relationship cannot be established from a single case, postpartum immune alterations should be considered when evaluating patients with persistent respiratory symptoms and epidemiologic risk factors for TB.

Cite: Gomez G, Perez JS, Torres J, Adetula I. Postpartum Immune Modulation and Reactivation of Latent Tuberculosis: A Case of Active Pulmonary Tuberculosis. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:035.

Abstract 036

Poster

Case report

Residents & fellows

Prayer-Associated Coronary Vasospasm: A Case Report

Alfredo Perez Tagle Tejada, Ermilo Echeverria-Ortegon, Qianlan Xi, Jonathan S. Roberts, Houman Khalili

Memorial Healthcare System

BACKGROUND

Myocardial infarction with nonobstructive coronary arteries (MINOCA) accounts for approximately 5–10% of acute myocardial infarctions and is more prevalent in women, occurring in about 10–15% of women compared with 3–5% of men. Coronary vasospasm is an underdiagnosed cause of MINOCA, associated with circadian and autonomic influences, and often requires provocative testing for diagnosis.

CASE PRESENTATION

A 40-year-old man with dyslipidemia and a strong family history of premature coronary artery disease presented with recurrent angina occurring exclusively during morning prayer, including one episode lasting 30 minutes without spontaneous resolution. Electrocardiography showed no ischemic changes, and troponin peaked at 0.470 ng/mL, consistent with NSTEMI. Echocardiography showed preserved biventricular function. Coronary angiography revealed normal epicardial arteries with mild mid-LAD myocardial bridging and normal filling pressures, consistent with MINOCA, prompting acetylcholine provocation testing.

RESULTS / FINDINGS

Acetylcholine provocation reproduced the patient's typical symptoms, ischemic ECG changes, and severe diffuse mid-to-distal left anterior descending artery spasm, confirming epicardial coronary vasospasm, with complete resolution following intracoronary nitroglycerin. The patient was discharged on a non-dihydropyridine calcium channel blocker and as-needed nitrates, with counseling on cardiovascular risk factor modification.

DISCUSSION & CONCLUSION

This case highlights coronary vasospasm as an underrecognized cause of MINOCA. Ischemic episodes occurring during morning prayer likely reflect the circadian vulnerability of coronary vasomotor tone, driven by the physiologic surge in sympathetic tone and catecholamine release upon awakening, rather than a prayer-specific mechanism. Early acetylcholine provocation testing and aggressive cardiovascular risk factor modification are essential to establish etiology and prevent recurrent ischemic events.

Cite: Perez Tagle Tejada A, Echeverria-Ortegon E, Xi Q, Roberts JS, Khalili H. Prayer-Associated Coronary Vasospasm: A Case Report. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:036.

Abstract 037

Poster

Case report

Residents & fellows

Recurrent Hemorrhagic Pleural Effusions in a Patient with Biopsy-Proven Extrapelvic Endometriosis Complicated by *Streptococcus mitis* Empyema

Andrea Abifaraj, P. Jimenez Garcia, Francisco Cedeño Torres, Valeria Gutierrez de Piñeres

Mount Sinai Medical Center, Miami Beach, FL

INTRODUCTION

Thoracic endometriosis syndrome (TES) is a rare manifestation of endometriosis involving functional endometrial tissue within the thoracic cavity, representing the most common site of extra-abdominopelvic disease. Manifestations include catamenial pneumothorax, hemothorax, hemoptysis, and pulmonary nodules, with right-sided involvement predominating. Diagnosis remains challenging because histopathologic confirmation is frequently absent: implants may be microscopic, inaccessible for biopsy, or obscured by chronic inflammation, yielding nondiagnostic cytology or tissue specimens, so diagnosis often relies on clinical history, imaging, surgical evaluation, and exclusion of alternative etiologies. We report a 35-year-old woman with biopsy-proven abdominal wall endometriosis and recurrent right-sided hemorrhagic pleural effusions who developed a *Streptococcus mitis* empyema, illustrating how superimposed infection can further complicate diagnosis and management of suspected TES.

CASE DESCRIPTION

A 35-year-old nulligravid woman with biopsy-proven abdominal wall endometriosis presented with progressive dyspnea and recurrent right-sided pleural effusions. In 2023 she developed a painful periumbilical mass that worsened with menstruation; biopsy later in 2023 confirmed endometriosis, and she was found to have a large right pleural effusion, ascites, and splenic/portal vein thrombosis. MRI in 2024 confirmed a 2.8-cm umbilical endometrioma, surgically excised later in 2024, followed by leuprolide acetate and letrozole. Despite treatment, hemorrhagic pleural effusions recurred; thoracentesis in 2025 showed an exudative effusion with cytology negative for malignancy. A year later, she presented with worsening dyspnea and pleuritic chest pain; imaging showed near-complete opacification of the right hemithorax with compressive atelectasis. A chest tube yielded hemorrhagic fluid, again cytology-negative, and cultures grew *Streptococcus mitis*, confirming empyema. Given loculated collections and incomplete re-expansion, she underwent robotic-assisted VATS with decortication and pleurodesis; intraoperative findings showed dense fibrinopurulent adhesions without gross endometriotic implants, and pathology did not identify endometrial tissue. She improved postoperatively, completed targeted antimicrobial therapy, and was discharged with multidisciplinary follow-up across Infectious Diseases, Pulmonology, Thoracic Surgery, and Gynecology.

DISCUSSION

Negative cytology and operative pathology do not exclude TES, as thoracic implants may be hormonally inactive or obscured by fibrosis; diagnosis therefore relies on integrating clinical history, imaging, operative findings, and prior extrathoracic histologic confirmation rather than a single modality [2,3]. The most distinctive feature of this case was culture-confirmed *Streptococcus mitis* empyema superimposed on recurrent hemorrhagic effusions, a complication rarely described alongside suspected TES [1-3]. Microbiologic confirmation appropriately prioritized surgical source control, but an acute infectious process should not prematurely end evaluation for an underlying chronic pleural disorder; the empyema likely represented a superimposed complication rather than a competing diagnosis. Long-term management required ongoing gynecologic follow-up given the substantial recurrence risk of advanced endometriosis. Thoracic endometriosis syndrome should remain in the differential diagnosis of recurrent hemorrhagic pleural effusions in reproductive-age women with known endometriosis, even absent histopathologic confirmation, as secondary bacterial infection may obscure the underlying disease process.

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Cite: Abifaraj A, Jimenez Garcia P, Cedeño Torres F, Gutierrez de Piñeres V. Recurrent Hemorrhagic Pleural Effusions in a Patient with Biopsy-Proven Extrapelvic Endometriosis Complicated by Streptococcus mitis Empyema. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:037.

Abstract 038

Poster

Case report

Residents & fellows

Severe Preventable Iron Deficiency Anemia Driven by Excessive Cow's Milk Intake in Early Childhood

Arantxa Lagunas Salazar, Samantha Zamora Ávila

Supervising author: Richard Arboleda

Nicklaus Children's Hospital

BACKGROUND

We report a previously healthy pediatric patient who presented to our Emergency Department in apparently good general condition despite a critical hemoglobin value of 3.4 g/dL, which is normally a life-threatening value. The patient was previously seen by her primary care pediatrician during well child visits.

CASE PRESENTATION

A 16-month-old girl, previously healthy, presented to our Emergency Department with a 2 weeks history of progressive pallor, fatigue and decreased oral intake. At admission, the CBC showed a severe microcytic anemia, with a critical hemoglobin value of 3.4 g/dL, MCV of 60.5 fL and RDW 28.4%. The iron panel showed an iron deficiency with low ferritin of 3 ng/mL and iron level at 25.8 ug/dL. She was previously seen by her primary care pediatrician during the 12-months well child visit and hemoglobin was reported normal. On clinical examination, the patient's skin and mucous membranes were markedly pale, she was tachycardic and with a systolic cardiac murmur. The anamnesis highlighted the presence of an excessive cow's milk consumption, with a total intake of 40 oz daily, including milk and dairy products. An echocardiogram did not show structural abnormalities and the occult blood in stool was negative. We ruled out other possible causes of iron deficiency anemia. She received two transfusions of packed red blood cells and subsequently intravenous iron preparations (total amount 50 mg) followed by oral iron supplementation. The Hb value at discharge was 6.9 g/dL.

Key findings In this patient, the most likely cause of her current clinical presentation is due to excessive whole cow's milk intake. Excessive whole cow's milk consumption is the most common dietary cause of iron deficiency anemia in toddlers, typically between 12 to 36 months. It produces a microcytic, hypochromic anemia through different mechanisms. One of them is that it contains very little bioavailable iron and high volumes create early satiety and displace iron rich solid foods. Additionally, calcium blocks the DMT-1 channel and casein binds iron to form a non absorbable complex, reducing the absorption. Management consists of dietary modification, such as limiting total milk consumption to 16 oz per day, including all dairy products. Pediatricians should encourage iron-rich foods, especially in this age group or include oral supplementation with elemental iron.

CONCLUSION

When approaching a well child visit, routine, structured dietary screening should be considered to prevent severe nutritional complications. We suggest pediatricians ask detailed information about the amount of food ingestion in each group of age and include laboratories if needed. This type of microcytic anemia caused by iron deficiency secondary to an incorrect diet can be prevented in well child visits, providing the right supplementation on time. This case highlights that milk overload is a preventable risk factor capable of causing severe, life-threatening anemia requiring emergency intervention and anticipatory guidance regarding strict milk limits during early well-child visits.

Cite: Lagunas Salazar A, Zamora Ávila S. Severe Preventable Iron Deficiency Anemia Driven by Excessive Cow's Milk Intake in Early Childhood. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:038.

Abstract 039

Poster

Case report

Residents & fellows

Stercoral Colonic Perforation: A Rare but Serious Complication of GLP-1 Receptor Agonist–Induced Constipation

Aida Sarita Gonzalez, Usmaan Topiwala, Nathan Leavitt, Ravi Patel, Anil Ram, John Abernathy

HCA Florida Citrus Hospital

INTRODUCTION

Glucagon-like peptide-1 (GLP-1) receptor agonists are widely used for obesity and type 2 diabetes. Though generally well tolerated, gastrointestinal effects, including constipation, are common. Severe constipation leading to fecal impaction and stercoral colonic perforation is exceedingly rare but carries significant morbidity and mortality. We present a case of stercoral perforation of the transverse colon associated with long-term semaglutide therapy.

CASE PRESENTATION

A 30-year-old woman with postural orthostatic tachycardia syndrome (POTS), heterozygous factor V Leiden mutation (not anticoagulated), endometriosis, and class I obesity treated with semaglutide presented with two days of severe intermittent epigastric pain, nausea, and vomiting with occasional blood-streaked emesis, along with progressive constipation and hard, pebble-like stools. Labs showed leukocytosis of $17.4 \times 10^9/L$ with a left shift. CT of the abdomen and pelvis revealed marked fecal impaction of the ascending and transverse colon with pericolonic fat stranding adjacent to the distal transverse colon, raising concern for an underlying stricture.

Despite aggressive medical management with polyethylene glycol, Gastrografin enemas, and antiemetics, her pain worsened and she developed overflow diarrhea. Repeat CT on hospital day four showed pneumatosis and findings concerning for distal transverse colonic perforation with a possible colojejunal fistula. She underwent emergent exploratory laparotomy with partial transverse colectomy and primary anastomosis. Operative findings confirmed stercoral perforation from pressure necrosis caused by a large fecal bezoar, without fistula or malignancy. Her postoperative course was complicated by ileus, and limited antibiotic options due to multiple drug allergies necessitated empiric meropenem. She recovered and was discharged with plans for outpatient colonoscopy to exclude underlying colonic pathology.

DISCUSSION

Stercoral perforation results from prolonged pressure of impacted fecal material on the colonic wall, causing ischemia, necrosis, and eventual perforation. GLP-1 receptor agonists slow gastrointestinal motility and are associated with constipation, which may predispose susceptible patients to fecal impaction. In this patient, chronic semaglutide use likely impaired colonic transit and promoted stool accumulation, culminating in stercoral perforation. As GLP-1 receptor agonist use expands, clinicians should maintain a high index of suspicion for severe constipation and impaction-related complications in patients with persistent abdominal pain, refractory constipation, or symptoms worsening despite standard bowel regimens. Early recognition and intervention may prevent progression to bowel ischemia and perforation, potentially avoiding emergent surgery.

CONCLUSION

This case highlights stercoral colonic perforation as a rare but serious complication of GLP-1 receptor agonist–associated constipation. Increased awareness of severe gastrointestinal adverse effects is essential as these medications become more widely prescribed for both diabetes and weight management.

Cite: Gonzalez AS, Topiwala U, Leavitt N, Patel R, Ram A, Abernathy J. Stercoral Colonic Perforation: A Rare but Serious Complication of GLP-1 Receptor Agonist–Induced Constipation. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:039.

Abstract 040

Poster

Case report

Residents & fellows

The Appendix That Wasn't: Myeloid Sarcoma Unmasked as Acute Appendicitis in Post-Transplant Relapsed Myelodysplastic Syndrome

Xander Ortiz Sepulveda, Yaima Valdes, Ji Fan

INTRODUCTION

Myeloid sarcoma (MS) is a rare extramedullary AML-related tumor (~2/million incidence). It may arise de novo, with concurrent AML/MDS, or as relapse – including post-allogeneic HSCT. GI involvement occurs in 7–11% of cases (ileum most common); appendiceal MS mimicking acute appendicitis is extraordinarily rare (<20 reported cases worldwide). Histologic overlap with non-Hodgkin lymphoma drives misdiagnosis rates up to 47%. Extramedullary relapse accounts for 5–12% of post-HSCT relapses (~70% isolated).

CASE PRESENTATION

A 75-year-old woman with prior treatment with vidaza/venetoclax, HFrEF, hypothyroidism, hypertension, and recent multifocal pneumonia/bronchiolitis obliterans on antifungal prophylaxis with high-grade MDS (MDS-IB2, complex karyotype, IPSS-M Very High Risk), relapsed 3 months after matched-unrelated-donor allo-HSCT (10% chimerism on a 2025 marrow biopsy). Presented in 2026 with acute abdominal pain, nausea, vomiting, and diarrhea. Labs showed leukocytosis (22,000/ μ L, 11% blasts), elevated LDH, and mild hyperuricemia. CT showed findings consistent with acute appendicitis, and she underwent laparoscopic appendectomy with intraoperative findings of acute appendicitis.

Surgical pathology revealed an unexpected diagnosis of myeloid sarcoma of the appendix, representing progression of her MDS to AML with monocytic differentiation post-HSCT. Histology showed a dense atypical mononuclear infiltrate with myeloblastic morphology across the appendiceal wall. Immunohistochemistry was positive for CD33, CD43, CD117 (dim), CD163, CD68, and CD34, and negative for CD15/CD56 – confirming myeloid lineage.

DISCUSSION

Appendiceal MS is among the rarest MS presentations; this appears to be one of the first reported cases combining appendiceal MS, acute appendicitis presentation, and relapsed post-HSCT MDS. Proposed mechanisms include aberrant leukemic stem cell homing (CXCR4/CCR5, MMPs, EMT pathways) and reduced graft-versus-leukemia effect from reduced-intensity conditioning. The case highlights the risk of missing MS without routine histopathology, even in classic surgical presentations.

CONCLUSION

This case showed extremely rare appendiceal MS masquerading as acute appendicitis in relapsed post-HSCT MDS. Key takeaways is to always maintain broad differentials in immunocompromised patients with abdominal emergencies; always pursue routine pathology on resected specimens in hematologic malignancy patients; and engage hematology-oncology early, as pathology may redirect the entire treatment course.

Cite: Ortiz Sepulveda X, Valdes Y, Fan J. The Appendix That Wasn't: Myeloid Sarcoma Unmasked as Acute Appendicitis in Post-Transplant Relapsed Myelodysplastic Syndrome. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:040.

Abstract 041

Poster

Case report

Residents & fellows

The CBC Was Screaming: Acute Myeloid Leukemia Unmasked by Gastrointestinal Bleeding

Miguel Enrique Rivas Gelves, Leonor Duarte, Nicole Monroig, Maria Artavia, Jose Gascon

HCA Florida Kendall Hospital

BACKGROUND

Cytopenias in a patient with gastrointestinal bleeding are usually attributed to blood loss, but this framework can fail when the marrow itself is the primary site of disease. Acute myeloid leukemia (AML) presenting primarily as gastrointestinal bleeding is uncommon, and most reported cases involve thrombocytopenia or coagulopathy as the mechanism of bleeding. We describe a case in which specific CBC and differential findings, present from admission, pointed to an occult AML before the bleeding source itself was identified.

CASE PRESENTATION

An 83-year-old woman with hypertension, type 2 diabetes, and dyslipidemia was transferred for melena, hematochezia, progressive weakness, and anemia requiring transfusion. She remained afebrile and hemodynamically stable, and no active bleeding was captured on serial evaluation. Her presenting CBC showed leukopenia (WBC $3.7 \times 10^3/\mu\text{L}$), severe neutropenia (ANC $0.51 \times 10^3/\mu\text{L}$), marked monocytosis (36%), elevated red cell distribution width, circulating immature granulocytes, and nucleated red blood cells, all attributed initially to hemorrhage. EGD showed chronic gastritis, colonoscopy showed diverticulosis and hemorrhoids, and video capsule endoscopy showed nonbleeding small-bowel lesions; none explained the severity of the anemia, and the cytopenias persisted despite repeated transfusion and negative stool occult blood testing.

RESULTS

Persistent leukopenia and monocytosis prompted hematology consultation. Peripheral blood flow cytometry identified circulating myeloblasts expressing CD34, CD117, and CD33. Bone marrow biopsy showed a hypercellular marrow largely replaced by immature, dysplastic hematopoietic cells with a prominent blast population showing monocytic differentiation and dysplasia across all three lineages, including dysplastic megakaryocytes and erythroid precursors; blasts reached 23% by manual differential. Cytogenetics revealed a complex karyotype with del(5q), del(17p)/TP53 loss, and trisomy 8. The integrated findings were consistent with AML with monocytic differentiation and myelodysplasia-related features. The patient was lost to follow-up before treatment could begin.

DISCUSSION & CONCLUSION

Blood loss classically produces reactive neutrophilia, not neutropenia; monocytosis, immature myeloid forms, and nucleated red blood cells reflect disordered marrow release rather than a transient post-hemorrhagic response. In this case, these findings preceded both the endoscopic workup and hematology consultation in signaling the diagnosis, and the morphologic picture, a hypercellular marrow effaced by dysplastic blasts rather than one depleted by blood loss, confirmed a primary marrow disorder. Her adverse-risk cytogenetic profile carries a poor prognosis, which is why early recognition matters for timely hematology-oncology referral and treatment planning. Cytopenias in a patient with gastrointestinal bleeding should be interpreted independently of the presumed bleeding source rather than assumed reactive by default. When CBC abnormalities are disproportionate to identified blood loss, early hematologic evaluation should be pursued regardless of a seemingly sufficient concurrent explanation such as active bleeding.

Cite: Rivas Gelves ME, Duarte L, Monroig N, Artavia M, Gascon J. The CBC Was Screaming: Acute Myeloid Leukemia Unmasked by Gastrointestinal Bleeding. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:041.

Abstract 042

Poster

Case report

Residents & fellows

The Melanoma Mimic: Zoonotic Anchoring in Neurodiagnostic Failure

Marissa Wu, Muneeza Rashid, Parsa Kamali

Supervising author: Luis Daniel Lugo

Presented by Samuel Chavez Herrera

Lakeland Regional Health

BACKGROUND

Multiple intracranial lesions carry a broad differential neoplastic, infectious, inflammatory, and vascular causes. When a patient presents with a zoonotic exposure history alongside multifocal brain imaging, physicians are at risk of anchoring on infection and rashly closing the diagnostic process. This case matters, it demonstrates how a exposure narrative can change clinical reasoning, delay diagnosis, and expose patients to unnecessary therapy. We present an immunocompetent man whose hemorrhagic, multifocal melanoma brain metastases initially mock a disseminated CNS infection, emphasizing the diagnostic expertise needed when imaging findings are radiographically nonspecific.

CASE PRESENTATION

A 78-year-old man with HNT, DM2, BPH and GERD presented as a stroke alert after his wife found him with word-finding difficulty and nonsense speech following an afternoon nap; he was last well that morning. He reported several days of progressive dysphagia and word substitution, calling chili "Caesar salad." Examination revealed a mild right facial droop, inappropriate responses, slurred speech, and antalgic gait (NIHSS 3). Blood pressure was 177/101mmHg and WBC count was 12.3. Non-contrast CT and CT angiography demonstrated multiple hemorrhagic, hyperdense masses with extensive vasogenic edema; CT perfusion showed no ischemic penumbra, arguing against acute infarction. A history of eating raw sausage from the freezer and exposure to rodent droppings prompted concern for toxoplasmosis, leptospirosis, hantavirus, and disseminated fungal disease, and empiric vancomycin, cefepime, and voriconazole was initiated.

FINDINGS

A comprehensive infectious workup was unrevealing: procalcitonin 0.07; negative blood and fungal cultures; and negative cryptococcal antigen, Aspergillus galactomannan, Fungitell, Histoplasma, and Toxoplasma serologies; urinalysis and CXR were normal. Contrast-enhanced MRI revealed numerous enhancing lesions characteristic of metastatic melanoma. CT of the chest, abdomen, and pelvis identified no primary or extracranial metastatic site. Empiric antimicrobials were discontinued. Neurosurgery deferred biopsy; oncology recommended whole-brain radiotherapy. The patient was discharged to outpatient radiation therapy with memantine for cognitive support. The diagnosis rested on characteristic imaging, as no biopsy was obtained for histologic confirmation.

DISCUSSION & CONCLUSION

This case illustrates how a zoonotic exposure can change clinical reasoning. Multiple hemorrhagic, edematous lesions are radiographically nonspecific, and melanoma is among the primary tumors most prone to intratumoral hemorrhage, frequently producing vasogenic edema that mimics abscess or septic emboli. In immunocompetent patients, toxoplasmosis and primary CNS lymphoma are less likely than in immunocompromised hosts, and the patient's intact immune status should have lowered the infectious differential sooner. Anchoring on the zoonotic narrative and premature closure delayed recognition and exposed the patient to unnecessary therapy. The central lesson is diagnostic discipline: contrast-enhanced MRI, not CT, is the decisive study for multifocal enhancing lesions. A thorough exposure history should broaden, not narrow, the differential, and deliberately revisiting the working diagnosis when confirmatory data are lacking is the most effective safeguard against anchoring and premature closure. A key limitation is the absence of tissue confirmation.

Cite: Wu M, Rashid M, Kamali P. The Melanoma Mimic: Zoonotic Anchoring in Neurodiagnostic Failure. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:042.

Abstract 043

Poster

Case report

Residents & fellows

Unexplained Hypoxemia Following Acute Ischemic Stroke: Unmasking Platypnea-Orthodeoxia Syndrome in the Setting of a Patent Foramen Ovale

Brooke Ohlman, Muneeza Rashid, Ahmed Abdelkarim, Adrian Feliciano

Lakeland Regional Health

INTRODUCTION

Patent foramen ovale (PFO) is implicated in cryptogenic stroke and, less commonly, refractory hypoxemia via right-to-left shunting. Though often asymptomatic, PFO may rarely present with Platypnea-Orthodeoxia Syndrome (POS)—positional hypoxemia that worsens upright and resolves supine. Diagnosis is often delayed, particularly in acute care where common causes of hypoxia dominate the differential. This case highlights the importance of recognizing POS in a post-stroke patient with a PFO and recurrent unexplained hypoxemia.

CASE PRESENTATION

A 72-year-old male with hypertension, hyperlipidemia, prediabetes, and prior CVA without residual deficits presented with acute expressive aphasia. Imaging confirmed acute left MCA ischemia with probable thrombus in the proximal left M2 branch; he received tenecteplase. Echocardiography showed EF 50–55%, mild mitral and tricuspid regurgitation, and a PFO, with TEE confirming a significant right-to-left interatrial shunt. Based on a RoPE score estimating only 38% probability of PFO-related stroke, cardiology favored paroxysmal atrial fibrillation and recommended long-term monitoring prior to closure.

The course was complicated by recurrent desaturation to 88%, requiring high-flow nasal cannula and BiPAP, with one episode necessitating ICU transfer for hypoxic respiratory failure requiring vasopressors. Extensive workup (serial radiographs, D-dimer, lower extremity duplex, CT chest, procalcitonin) identified no definitive cardiopulmonary or infectious etiology. The turning point came when pulmonology identified a positional pattern to oxygen requirements consistent with POS (sitting 91%, supine 98%). Right heart catheterization confirmed normal pulmonary pressures, and continuous telemetry showed no atrial fibrillation, diminishing the initial leading differential. PFO closure on hospital day 21 was uncomplicated, promptly stabilizing room-air oxygenation to 94–97%. The patient was started on DAPT and transferred to a skilled nursing facility.

DISCUSSION

This case illustrates the diagnostic challenge of POS in a hospitalized post-stroke patient, where evaluation appropriately focused on common causes of hypoxia, delaying recognition of the positional component. It parallels prior stroke-associated POS reports in which older patients with post-stroke dyspnea and a PFO improved after percutaneous closure—treating both the shunt and a stroke risk factor. POS requires both an anatomic defect (shunt) and a functional/positional component, explaining why a "hemodynamically insignificant" shunt can cause profound positional hypoxemia despite normal right heart pressures. Before attributing hypoxemia to a PFO, mimics such as hepatopulmonary syndrome, pulmonary AVMs, and V/Q mismatch must be excluded. Key points: (1) consider POS for unexplained hypoxemia when a PFO is known, even if the shunt appears insignificant; (2) the positional nature of desaturation is easily obscured in acutely ill patients with limited mobility; and (3) rapid resolution after closure serves as both diagnostic confirmation and definitive therapy. Contemporary series report a median symptom-to-diagnosis delay near 13 weeks and marked oxygenation improvement after closure. However, POS patients carry higher long-term mortality—largely non-cardiovascular—suggesting POS may mark broader underlying illness rather than an isolated curable lesion.

Cite: Ohlman B, Rashid M, Abdelkarim A, Feliciano A. Unexplained Hypoxemia Following Acute Ischemic Stroke:

Unmasking Platypnea-Orthodeoxia Syndrome in the Setting of a Patent Foramen Ovale. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:043.

Abstract 044

Poster

Case report

Residents & fellows

Watermelon Stomach Without Cirrhosis: A Rare Cause of Transfusion-Dependent GI Bleeding

Sofia Gonzalez Rubiano, Mohammad Mehdi Johari Moghadam, Robert Burns, Camila Villacreses, Christiane Martell Rodriguez

Lakeland Regional Health

BACKGROUND

Gastric antral vascular ectasia (GAVE) is an uncommon but important cause of chronic gastrointestinal blood loss and nonvariceal upper GI bleeding. It is frequently misdiagnosed as hemorrhagic gastritis and, despite requiring neither cirrhosis nor portal hypertension, is often mistaken for portal hypertensive gastropathy (PHG). Unlike GAVE, PHG is a distinct entity with different endoscopic location, histology, and treatment. This case highlights GAVE as an underrecognized driver of transfusion-dependent anemia in an elderly patient without liver disease.

CASE PRESENTATION

An 82-year-old woman with coronary artery disease, paroxysmal atrial fibrillation (not anticoagulated), hypertension, and hypothyroidism presented after outpatient labs showed hemoglobin 4.5 g/dL. She described several days of progressive dizziness without hematemesis, melena, hematochezia, chest pain, or dyspnea. She was hemodynamically stable with pallor and no abdominal tenderness. She had biopsy-confirmed antral GAVE on serial endoscopies since 2022, with four prior sessions of argon plasma coagulation (APC), a nadir hemoglobin of 3.1 g/dL, and at least eight transfusion episodes despite continuous oral iron.

FINDINGS

Admission hemoglobin was 5.2 g/dL with MCV 86, RDW 15.3, and normal leukocyte and platelet counts. Iron studies (iron 38, TIBC 242, transferrin saturation 15.7%, ferritin 49.5 ng/mL) with normal folate and B12 were consistent with iron deficiency from chronic GI blood loss. Repeat endoscopy re-demonstrated antral GAVE with a normal esophagus and duodenum and no varices; APC was performed. She received 3 units of packed red cells, with hemoglobin rising to 9.8 g/dL and resolution of dizziness. She was discharged on sucralfate, pantoprazole, and iron, with endoscopic follow-up in eight weeks.

DISCUSSION & CONCLUSION

Three features are instructive. First, GAVE typically bleeds occultly rather than overtly. Normal vital signs and a benign abdomen coexisted with a hemoglobin of 4.5 g/dL, so hemodynamic stability should not be falsely reassuring. Second, GAVE and PHG are distinct entities that are commonly confused. GAVE occupies the antrum with tortuous ectatic columns and shows fibrin thrombi with fibromuscular hyperplasia, whereas PHG affects the fundus and body with a mosaic snakeskin pattern and reflects portal hypertension. The distinction matters because PHG responds to portal pressure reduction with nonselective beta-blockers, whereas GAVE requires endoscopic therapy. Third, transfusion dependence is common and multifactorial. All patients warrant iron repletion, and modality selection is individualized. APC has historically been first-line, but recent meta-analyses demonstrate superior efficacy with endoscopic band ligation, including higher eradication rates, lower bleeding recurrence, fewer required sessions, and reduced transfusion requirements.

GAVE should be considered in any patient with unexplained transfusion-dependent iron deficiency anemia, including those without cirrhosis or portal hypertension. Accurate endoscopic and histologic distinction from PHG, paired with sustained iron repletion, is essential to appropriate management.

Cite: Gonzalez Rubiano S, Johari Moghadam MM, Burns R, Villacreses C, Martell Rodriguez C. Watermelon Stomach Without Cirrhosis: A Rare Cause of Transfusion-Dependent GI Bleeding. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:044.

Abstract 045

Poster

Case report

Residents & fellows

When Lipase Lies: Acute Pancreatitis with a Normal Serum Lipase

Sofia Gonzalez Rubiano, Mohammad Mehdi Johari Moghadam, Omar Zuhdi, Khoa Tran, Raji Shaher

Lakeland Regional Health

BACKGROUND

Acute pancreatitis (AP) is diagnosed when at least two of three criteria are met: characteristic abdominal pain, lipase or amylase $>3\times$ the upper limit of normal, or characteristic abdominal imaging findings. Although this framework, derived from the revised Atlanta classification and endorsed by the 2024 American College of Gastroenterology (ACG) guidelines, explicitly permits diagnosis without enzyme elevation, a normal lipase often prompts premature exclusion of AP. We present a case in which imaging and patient symptomatology were used to establish the diagnosis.

CASE PRESENTATION

A 21-year-old man with no significant medical history presented with five days of progressive burning non-radiating epigastric pain, with persistent nausea, vomiting, and complete oral intolerance. He denied fever, diarrhea, alcohol use, prior similar episodes, gallstones, abdominal trauma, or family history of pancreatitis. He reported occasional marijuana use, nicotine vaping, and recent methylprednisolone use. He was afebrile and hemodynamically stable, with epigastric and left upper quadrant tenderness without peritoneal signs.

FINDINGS

Laboratory studies were unremarkable: the serum lipase was only 14 U/L, ethanol levels were <10.1 mg/dL, triglycerides were 100 mg/dL, blood cultures were without growth, and the CBC and CMP were normal. CT abdomen/pelvis with contrast showed a mildly edematous pancreas concerning for AP. The patient was admitted for AP based on characteristic pain plus imaging, meeting two of three criteria despite normal lipase. He received aggressive fluids with Lactated Ringer's along with a pain regimen and antiemetics. Pain improved but vomiting persisted until metoclopramide was added. His diet was advanced quickly, which was well tolerated. The patient was later discharged with outpatient follow-up.

DISCUSSION & CONCLUSION

This case highlights the pitfall of relying on lipase alone to exclude acute pancreatitis: in delayed presentations the enzyme may normalize, and cross-sectional imaging is warranted whenever clinical suspicion remains high. Serum lipase rises within 4-8 hours of symptom onset and normalizes within 8-14 days; in patients presenting days later, it may already have fallen. At the $\geq 3\times$ threshold, pooled sensitivity of lipase is approximately 80%, so up to 20% of patients fail to meet the enzyme criterion. In one series of 234 patients with confirmed AP, 27% lacked a threefold lipase elevation and would have been underdiagnosed without CT. The 2024 ACG guidelines similarly note amylase may be normal on admission in as many as one-fifth of patients. Contrast-enhanced CT provides greater than 90% sensitivity and specificity for AP and is particularly valuable when there is diagnostic uncertainty. Standard etiologic workup excluded alcohol, biliary disease, and hypertriglyceridemia. Recent corticosteroid exposure was noted; drug-induced pancreatitis is rare but remains a diagnosis of exclusion here.

Acute pancreatitis may present with an entirely normal lipase, particularly with delayed presentation. Diagnosis requires only two of three criteria, and lipase alone should not be used to exclude AP. When clinical suspicion is high, cross-sectional imaging should be obtained to prevent missed or delayed diagnosis.

Cite: Gonzalez Rubiano S, Johari Moghadam MM, Zuhdi O, Tran K, Shaher R. When Lipase Lies: Acute Pancreatitis with a Normal Serum Lipase. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:045.

Abstract 046

Poster

Case report

Residents & fellows

When the Marrow Runs Out of Iron: Severe Iron Deficiency Masquerading as Bone Marrow Failure

Andrea Abifaraj, Francisco Cedeño Torres, Valeria Gutierrez de Piñeres, O. Pizarro

Mount Sinai Medical Center, Miami Beach, FL

INTRODUCTION

Pancytopenia with severe anemia and impaired reticulocyte production typically raises concern for primary bone marrow failure or infiltration. Although iron deficiency is common, profound iron deficiency causing pancytopenia is rare. We present a patient whose severe pancytopenia mimicked marrow failure, with bone marrow examination revealing preserved hematopoiesis but completely absent storage iron.

CASE DESCRIPTION

A 39-year-old woman with no known chronic medical conditions presented with acute chest pain and reported two years of fatigue and exertional dyspnea. She described longstanding severe menorrhagia, easy bruising, and prolonged bleeding after minor trauma. Initial studies revealed hemoglobin 3.3 g/dL, mean corpuscular volume 58 fL, white blood cell count 2.66 K/ μ L, platelet count 73 K/ μ L, absolute neutrophil count 0.74 K/ μ L, and absolute reticulocyte count 0.0163 M/ μ L. Peripheral smear demonstrated marked microcytosis, hypochromia, anisopoikilocytosis, teardrop cells, and rare reticulocytes, raising concern for marrow aplasia or infiltration. Cardiac evaluation was unrevealing. Extensive evaluation for infectious, autoimmune, hemolytic, nutritional, and clonal hematologic disorders was negative. Pelvic ultrasound demonstrated a leiomyomatous uterus with 4.2-cm fundal subserosal and 5.3-cm anterior lower-segment intramural/subserosal leiomyomas. Following four units of packed red blood cells, hemoglobin increased to approximately 9 g/dL, but thrombocytopenia persisted. Bone marrow biopsy demonstrated a markedly hypercellular marrow with erythroid hyperplasia, preserved granulocytic and megakaryocytic maturation, no fibrosis, and critically, absent storage iron. Flow cytometry showed no immunophenotypic abnormalities and cytogenetics demonstrated a normal 46,XX karyotype. Initial ferritin was 2.8 ng/mL. Subsequent iron studies showed iron 29 μ g/dL, total iron-binding capacity 407 μ g/dL, and iron saturation 7.1%. She received intravenous iron sucrose 200 mg daily for five days. Her leukocyte count, hemoglobin, platelet count, and mean corpuscular volume progressively improved, reaching 6.02 K/ μ L, 10.4 g/dL, 90 K/ μ L, and 76.9 fL, respectively.

DISCUSSION

This case demonstrates that profound iron deficiency can produce pancytopenia despite a markedly hypercellular marrow. The absence of marrow storage iron provided a critical diagnostic clue: hematopoiesis was preserved, but iron availability was profoundly depleted. Together with severe microcytosis, ferritin of 2.8 ng/mL, chronic menstrual blood loss, and multilineage recovery following iron replacement, these findings supported severe iron deficiency rather than intrinsic marrow failure. Clinicians should recognize that pancytopenia does not necessarily indicate a hypocellular or infiltrated marrow and should carefully evaluate iron stores when marked microcytosis accompanies unexplained cytopenias.

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Cite: Abifaraj A, Cedeño Torres F, Gutierrez de Piñeres V, Pizarro O. When the Marrow Runs Out of Iron: Severe Iron Deficiency Masquerading as Bone Marrow Failure. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:046.

Abstract 047

★ Best Research Abstract — Residents & Fellows

Poster

Original research

Residents & fellows

Acid Suppression Use Among Hispanic Adults Without Documented Reflux Disease

Mateo Useche, Maria Alejandra Molina Rodriguez, Sharon Lechtig-Wasserman, Nazareth Jaramillo-Correa, Prashanth V. Kumar

Desert Valley Hospital

BACKGROUND

Gastroesophageal reflux disease (GERD) is a common reason for long-term acid-suppressive therapy, yet the diagnosis is often based on symptoms rather than an objective test. As a result, what appears in the medical record may depend on how symptoms are elicited and documented. We examined whether Hispanic adults in the United States differ from non-Hispanic White adults in how often GERD is documented relative to proton pump inhibitor (PPI) use.

METHODS

We analyzed adults aged 20 years or older using three national datasets. The National Health and Nutrition Examination Survey (NHANES, 2017 to March 2020) provided self-reported prescription medications with the condition each was taken for, in 9,232 adults including 1,997 Hispanic adults. The Medical Expenditure Panel Survey (MEPS, 2017 to 2023) provided both coded diagnoses and actual pharmacy fills in the same people, in 136,172 adults including 29,010 Hispanic adults. The National Ambulatory Medical Care Survey health center component (NAMCS, 2022 to 2024) provided visit-level coding across 973,087 adult visits, including 283,743 by Hispanic patients. GERD was defined by ICD-10 code K21 and treatment by any PPI. Estimates were survey-weighted, and logistic regression adjusted for age and sex.

RESULTS. Across all three datasets, Hispanic adults had lower rates of documented GERD and PPI use. In MEPS, GERD was coded in 3.10% of Hispanic adults versus 8.44% of non-Hispanic White adults (α OR 0.48, 95% CI 0.44–0.53), while PPI fills occurred in 5.17% versus 10.64% (α OR 0.65, 0.60–0.70). In NHANES, 4.16% of Hispanic adults reported a prescription for GERD versus 7.56% of White adults, and 5.75% versus 11.02% reported any PPI use (α OR 0.72, 0.53–0.96). In NAMCS, GERD was coded in 2.26% of Hispanic visits versus 5.64% of White visits (α OR 0.42, 0.29–0.61).

Among adults already filling a PPI, only 46.3% of Hispanic patients had a GERD diagnosis compared with 66.5% of White and 65.3% of Black patients. Much of this difference reflected alternative upper gastrointestinal diagnoses, particularly gastritis (13.6% vs 1.7%) and dyspepsia (9.5% vs 5.8%). Hispanic PPI users were also more likely to have no upper gastrointestinal diagnosis documented (28.3% vs 22.3%; adjusted OR 1.35, 1.17–1.56). Among patients with documented GERD, Hispanic adults remained less likely to receive a PPI (77.2% vs 83.8%; adjusted OR 0.67, 0.55–0.82). No difference was observed by nativity within Hispanic adults.

CONCLUSIONS

Hispanic adults were less likely to have GERD documented and less likely to receive PPIs than non-Hispanic White adults. Even among patients receiving PPIs, GERD was documented in fewer than half of Hispanic patients, with gastritis and dyspepsia used more often instead. These data cannot determine whether this reflects true differences in disease, diagnostic labeling, or broader documentation patterns. Hispanic adults also had fewer coded conditions overall, suggesting that some of the observed gap may reflect less complete documentation more generally. Inconsistent diagnostic labeling may affect continuity of care, medication review, and quality measurement.

Cite: Useche M, Molina Rodriguez MA, Lechtig-Wasserman S, Jaramillo-Correa N, Kumar PV. Acid Suppression Use Among Hispanic Adults Without Documented Reflux Disease. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:047.

Abstract 048

Poster

Quality improvement

Residents & fellows

Advancing Health Equity in Radiation Oncology: CEBRE Implementation for Multilingual Patients

Meghan Mattimore, Yennis Leyva, Myriam Chaves, Martiza Crayton, Alejandro Gonzalez-Motta, Serguei A. Castañeda

CB Oncology Partners

BACKGROUND

Communicating the External Beam Radiotherapy Experience (CEBRE) is a graphic educational tool developed to improve patient understanding of external beam radiotherapy (EBRT). Designed at a 3rd-grade reading level, CEBRE uses cartoon-style illustrations and simplified text to depict each stage of radiotherapy, including consultation, simulation and planning, treatment delivery, and post-treatment care. It also includes customizable sections for treatment schedules, fraction counts, and annotated anatomy. Prior international implementations have demonstrated reductions in patient anxiety, as measured by the State-Trait Anxiety Inventory (STAI). Communication disparities and limited health literacy remain common in radiation oncology, particularly among linguistically diverse patient populations.

METHODS

Our clinic serves a predominantly Hispanic/Latino population and some members Haitian community. To address communication gaps and improve patient preparedness for radiotherapy, we will implement CEBRE as a quality-improvement intervention in two phases. Phase 1 will deploy existing English and Spanish versions of CEBRE. Following the consultation, the nurse practitioner will review the resource with the patient, who may then take it home for continued reference. Phase 2 will focus on translating CEBRE into Haitian Creole to address an identified language gap in our clinic. Patient understanding will be assessed at three time points: immediately after consultation (baseline), after CEBRE presentation and prior to the simulation planning session.

ANTICIPATED RESULTS We anticipate that CEBRE implementation will improve patient comprehension of the radiotherapy process and reduce treatment-related anxiety across assessment time points. We expect that the Haitian Creole translation will further enhance accessibility for Haitian patients, reducing reliance on informal interpreters and improving clarity of treatment expectations. Overall, the intervention is expected to strengthen patient engagement, support informed decision-making, and improve the quality of communication within the radiation oncology workflow.

CONCLUSION

Integrating CEBRE into our clinic's radiotherapy education process is expected to address key communication barriers affecting Hispanic and Haitian patients. By providing clear, visually accessible, and linguistically appropriate information, CEBRE has the potential to improve patient understanding and emotional readiness for treatment. The Haitian Creole version will be shared with the original CEBRE developers to support broader dissemination and public availability, contributing to more equitable radiotherapy education across diverse patient populations.

Cite: Mattimore M, Leyva Y, Chaves M, Crayton M, Gonzalez-Motta A, Castañeda SA. Advancing Health Equity in Radiation Oncology: CEBRE Implementation for Multilingual Patients. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:048.

Abstract 049

Poster

Quality improvement

Residents & fellows

Cervical cancer screening quality improvement in urban underserved primary care setting

Rachel Kim, Peter Palmero, Vanessa Villacorta, Eduard Tiozzo

Jackson Health System

Since the establishment of widespread screening and human papilloma virus (HPV) vaccination, cervical cancer has become one of the most preventable cancers, drastically dropping in its mortality in the U.S. by at least 50% since the 1970s. Primary care physicians offer such screenings and vaccinations in order to increase accessibility and as a tenant of preventive care management. As a primary care clinic in the only public hospital and tertiary care center in Miami-Dade County, we care for patients of incredibly diverse cultures and origins. The location of our health care system makes us the entry point for patients newly-arrived in the country from the entirety of the Caribbean basin, Central and South America and, coupled with its public nature, grants us the opportunity and honor to serve the unfunded, under-represented, underserved, and healthcare illiterate. Indeed, the vast majority of our patients are Spanish and Haitian Creole-speaking patients with overlapping complex illnesses and a history of scant-to-nonexistent medical care.

In this quality improvement project, we aim to evaluate the efficacy of cervical cancer screenings to age appropriate patients at the primary care clinic of Jefferson Reaves Sr. Clinic through data collection to determine if eligible patients are offered screening in a time appropriate manner and if abnormal results are followed up with evidence based guidelines for repeat pap smear testing vs. further testing (colposcopy, cone biopsy, etc.) Over the course of 3 months from January to March 2026, we independently reviewed patient charts who are eligible for cervical cancer screenings based on age and gender to determine retroactively if screening was performed and if follow up was needed for abnormal results. Based on our findings, we hope to identify barriers that prevent appropriate screenings in the Jefferson Reaves Clinic (JRC).

During our investigation, we found that over a 3 month period, there were 365 patients who were eligible for cervical cancer screening. 66% (242 patients) were up to date with their screening. 25% (92 patients) required a pap smear and/or HPV cotesting. Most interestingly, 6% (22 patients) required further work up with colposcopy testing. For 50% (11 patients) who appropriately were followed up with colposcopy, there was an average wait time of 3.5 months with referral to our GYN colleagues. The other 50% were not able to obtain the appropriate follow up secondary to socioeconomic, scheduling barriers and/or inappropriate retesting via pap smear according to the ASCCP guidelines.

Therefore, based on our findings, we hope to advocate for further resources at our primary care clinic with hospital administration to demonstrate the need for residency training with Family Medicine faculty in colposcopy testing in order to expedite work up and treatment of patients who are at risk of developing cervical cancer, particularly in vulnerable patient populations who face legal, socioeconomic barriers in seeking and obtaining evidence based and high-quality medical attention.

Cite: Kim R, Palmero P, Villacorta V, Tiozzo E. Cervical cancer screening quality improvement in urban underserved primary care setting. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:049.

Abstract 050

Poster

Original research

Residents & fellows

Lipoprotein(a) and Cognitive Function in the Northern Manhattan Study

Paula Rocha, Saurabh Kalra, Hannah Gardener, Tatjana Rundek

Jackson Memorial Hospital / University of Miami

BACKGROUND

Elevated lipoprotein(a) [Lp(a)] is an established cardiovascular risk factor, but its relationship with cognitive performance and cognitive decline remains uncertain. We examined associations between Lp(a) concentrations and cognitive function in participants from the Northern Manhattan Study (NOMAS).

METHODS

We analyzed 188 participants from the NOMAS MRI/neuropsychological subcohort with baseline Lp(a) measurements and repeated cognitive assessments over approximately 10 years. Lp(a) was evaluated continuously (per 10 mg/dL), dichotomized at >50 mg/dL, and as the highest decile (top 10%). Cross-sectional associations with global cognition, memory, language, executive function, and processing speed were examined using multivariable linear regression. Longitudinal cognitive trajectories were evaluated using linear mixed-effects models with participant-specific random intercepts. Model 1 adjusted for age, sex, race, and education; Model 2 additionally adjusted for hypertension, diabetes, and body mass index; and Model 3 further adjusted for smoking.

RESULTS

The mean baseline Lp(a) concentration was 38.7 mg/dL, and 30.9% of participants had Lp(a) concentrations >50 mg/dL. Cross-sectionally, higher continuous Lp(a) was associated with better processing speed across all models; in the fully adjusted model, each 10 mg/dL higher Lp(a) was associated with higher processing speed ($\beta=0.044$, $P=0.003$). Participants in the highest Lp(a) decile also demonstrated better baseline processing speed than the remaining participants ($\beta=0.450$, $P=0.026$). No significant cross-sectional associations were observed for global cognition, memory, language, or executive function. Longitudinally, continuous Lp(a) and Lp(a) >50 mg/dL were not associated with cognitive decline in any cognitive domain. However, participants in the highest Lp(a) decile experienced a faster decline in processing speed over time (Lp(a)×time interaction $\beta=-0.066$, 95% CI -0.125 to -0.008, $P=0.025$), while no significant longitudinal associations were observed for memory, language, or executive function.

CONCLUSIONS

Overall, Lp(a) was not consistently associated with baseline cognitive performance or longitudinal cognitive decline across multiple cognitive domains. Although the observed association with processing speed should be interpreted cautiously it suggests a potential vascular pathway as processing speed is particularly sensitive to cerebrovascular injury. This finding may reflect the effects of Lp(a) on cerebral small vessel disease that requires further confirmation.

Cite: Rocha P, Kalra S, Gardener H, Rundek T. Lipoprotein(a) and Cognitive Function in the Northern Manhattan Study. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:050.

Abstract 051

Poster

Quality improvement

Residents & fellows

Tele-Retinopathy Screening Quality Improvement Project

Franchesca Theis Higuera, Sulma Moredo Loo, Yaima Barreiro Delgado, Jorge Ordorica Alonso, Elizabeth Philippe, Kelly Mudon, Nicole Cook

Community Health of South Florida

BACKGROUND

Diabetic retinopathy is a leading cause of preventable vision loss among adults with diabetes. Although routine retinal screening is recommended, many patients do not receive timely evaluation, increasing the risk of delayed diagnosis and vision-threatening complications. Tele-retinal imaging can improve access to diabetic eye screening within primary care by reducing barriers associated with traditional ophthalmology referrals. This quality improvement project aimed to improve diabetic retinopathy screening while evaluating workflow effectiveness, image quality, and opportunities for process improvement.

METHODS

A quality improvement initiative using a Plan-Do-Study-Act (PDSA) framework was implemented in a community-based primary care setting. Patients with diabetes who were due for diabetic retinopathy screening were identified and offered point-of-care tele-retinal imaging. Staff received training on use of the retinal imaging equipment. Following a provider order, trained staff obtained retinal images, which were securely uploaded for remote review by an optometrist. Reports were returned to the primary care provider for review and appropriate follow-up. Screening volume, retinal findings, and image quality were monitored during the initial implementation cycle.

RESULTS

During the first PDSA cycle, 72 patients completed tele-retinal screening. Among screened patients, 21% were identified as having diabetic retinopathy, 53% had no evidence of retinopathy, and approximately 26% had poor-quality or otherwise inadequate images. Screening volume initially increased after implementation but subsequently declined. The proportion of poor-quality images increased over time. Operational challenges included variability in image acquisition technique, delays in image interpretation and processing, and staff preference for structured screening sessions rather than screening exclusively during routine clinical encounters.

DISCUSSION & CONCLUSION

Tele-retinal screening in a community primary care setting provided diabetic eye screening to patients due for evaluation and identified patients with diabetic retinopathy. However, inadequate images and declining screening volume highlighted limitations in workflow sustainability and staff proficiency with image acquisition. Additional equipment training, standardized imaging protocols, and dedicated screening sessions may improve image quality and screening consistency. Streamlining image interpretation and report turnaround may further strengthen the process. Continued PDSA cycles are needed to address technical and workflow barriers and support sustainable integration of tele-retinal screening into primary care.

Cite: Theis Higuera F, Moredo Loo S, Barreiro Delgado Y, et al. Tele-Retinopathy Screening Quality Improvement Project. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:051.

Abstract 052

Poster

Original research

Residents & fellows

The Hidden Burden of Iron Deficiency Anemia Among Hispanic Adults: Evidence From Three National Data Sources

Maria Alejandra Molina Rodriguez, Ivonne Grande-Ortiz, Alberto Ayala-Aguilar, Luis De Vivero, Prashanth V. Kumar

Desert Valley Hospital

BACKGROUND

Iron deficiency anemia is common, inexpensive to treat, and easy to miss. It is usually studied either through laboratory surveys, which show who has it, or through billing records, which show who carries the diagnosis. The two are rarely placed side by side, so the distance between how many Hispanic adults have iron deficiency anemia and how many are recognized as having it has not been measured directly.

METHODS

We combined three national data sources covering adults aged 20 years and older. The National Health and Nutrition Examination Survey (2017 to 2020) provided measured burden from hemoglobin and ferritin in 8,457 non-pregnant adults, including 1,796 Hispanic adults, using World Health Organization anemia thresholds and a ferritin cutoff below 30 ng/mL. The Medical Expenditure Panel Survey (2017 to 2023) provided person-level coded prevalence in 136,172 adults, including 29,010 Hispanic adults. The National Ambulatory Medical Care Survey health center component (2022 to 2024) provided visit-level coding across 973,087 adult visits, including 283,743 by Hispanic patients. All estimates were survey-weighted. Logistic regression adjusted for age and sex.

RESULTS

Among Hispanic adults, measured anemia prevalence was 7.03% (95% CI 5.64 to 8.73) and measured iron deficiency anemia was 4.08% (2.83 to 5.84), compared with 5.27% and 2.48% in non-Hispanic White adults (adjusted odds ratio 1.69, 1.00 to 2.85). This gap has narrowed over two decades: the same comparison in 1999 to 2002 gave an adjusted odds ratio of 2.38 (1.41 to 4.02), and the narrowing reflects a rising rate in White adults rather than any improvement among Hispanic adults. Coded prevalence told a different story. Any anemia was coded in 0.945% of Hispanic adults and 0.954% of non-Hispanic White adults. Iron deficiency anemia was coded in 0.398% and 0.399%, respectively. Documentation was therefore nearly identical between the two groups despite unequal measured burden, giving a measured-to-coded ratio of 10.3 in Hispanic adults versus 6.2 in non-Hispanic White adults. The pattern was widest in non-Hispanic Black adults, where measured iron deficiency anemia reached 8.63% against a coded prevalence of 0.575%, a ratio of 15.0. Visit-level data pointed the same way: iron deficiency anemia was coded at 0.93% of Hispanic adult health center visits versus 1.28% of non-Hispanic visits.

CONCLUSIONS

Hispanic adults are more likely than non-Hispanic White adults to have iron deficiency anemia, but they are no more likely to be diagnosed with it, and at health center visits they are coded for it less often. The disease is not being missed evenly. The groups carrying the most of it are the ones recognized the least. Two limits are worth stating. The three surveys sample different populations, so these numbers show a consistent direction rather than an exact difference, and a coded diagnosis only captures what a clinician wrote down. Even with those limits, all three sources point the same way. The fix is not a new test or a new drug. It is checking a ferritin instead of stopping at the hemoglobin in the patients already known to be at higher risk.

Cite: Molina Rodriguez MA, Grande-Ortiz I, Ayala-Aguilar A, De Vivero L, Kumar PV. The Hidden Burden of Iron Deficiency Anemia Among Hispanic Adults: Evidence From Three National Data Sources. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:052.

Abstract 053

Poster

Case report

International medical graduates

A Rare Presentation of Severe Hypothyroidism: Supraglottic Myxedema Causing Impending Airway Collapse in the Setting of Cervical DISH

Maria Camila Perez Vanegas, Vilma P. Turcios

Supervising author: Alejandra Garcia Fernandez

Presented by Katherine Fiol Olivero

BACKGROUND

Laryngeal myxedema is a rare life-threatening manifestation of severe hypothyroidism caused by mucopolysaccharide deposition in laryngeal tissues. While myxedema coma is a recognized endocrine emergency, laryngeal myxedema presenting with critical airway obstruction is exceptionally rare. When concurrent with structural airway disease, management becomes particularly challenging.

CASE PRESENTATION

A 78-year-old male with a 40 pack-year smoking history presented with one week of progressive hoarseness and slurred speech, followed by two days of inspiratory stridor. He had long-standing hypothyroidism managed with levothyroxine 200 mcg daily, though with improper administration technique.

On examination, vital signs revealed sinus bradycardia (56 beats/minute) and tachypnea with audible stridor. Bedside videolaryngoscopy demonstrated marked supraglottic edema with limited vocal cord visualization. The patient rapidly deteriorated with respiratory distress and oxygen desaturation, requiring awake intubation for airway protection.

Laboratory evaluation revealed profound hypothyroidism with TSH 92 mIU/L and free T4 below 0.10 ng/dL. Additional abnormalities included hyponatremia and elevated proBNP. Cervical spine imaging revealed severe diffuse idiopathic skeletal hyperostosis (DISH) with large anterior osteophytes displacing the pharynx anteriorly and contributing to airway narrowing at multiple levels with central canal stenosis.

DISCUSSION

The clinical presentation of progressive supraglottic edema, symptomatic bradycardia, hyponatremia, and severe biochemical hypothyroidism established the diagnosis of laryngeal myxedema causing critical upper airway compromise. Severe cervical DISH represented a major predisposing factor by chronically narrowing the upper airway and lowering the threshold for acute decompensation. Additional contributing factors included improper levothyroxine administration and tobacco exposure.

A multidisciplinary team initiated treatment using a myxedema coma protocol with intravenous levothyroxine, liothyronine, and corticosteroids with mechanical ventilation for airway protection. Serial thyroid function testing demonstrated progressive biochemical improvement with declining TSH and rising free T4 levels. Successful extubation occurred four days after intubation with complete resolution of inspiratory stridor.

Post-extubation, formal swallowing evaluation confirmed significant oropharyngeal dysphagia with aspiration risk, attributed to extrinsic pharyngeal compression from DISH. Despite resolution of laryngeal edema and optimization of hypothyroidism, unsafe swallowing mechanics persisted, necessitating surgical management.

CONCLUSION

This case highlights laryngeal myxedema as a rare but critical presentation of severe hypothyroidism. Recognition of concurrent predisposing factors, is essential for comprehensive management. Multidisciplinary collaboration and individualized treatment approaches using a myxedema coma protocol may be effective when established guidelines are unavailable.

Cite: Perez Vanegas MC, Turcios VP. A Rare Presentation of Severe Hypothyroidism: Supraglottic Myxedema Causing Impending Airway Collapse in the Setting of Cervical DISH. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:053.

Abstract 054

★ Best Case Report — International Medical Graduates

Poster

Case report

International medical graduates

An Incidental Situs Inversus Totalis in a Pediatric Case of Granulomatous Panuveitis: A Case Report

Carlos Eduardo Solórzano Flores, Daniel Doham Aguilar Castro, Fabiola Langner-Salinas, Carolina Paz Hovelmeyer Jurgens, Diya Mehta

Universidad Nacional Autónoma de Honduras

BACKGROUND

Situs inversus totalis (SIT) is a rare congenital condition, affecting 1 in 20000 births, in which the thoracic and abdominal organs are transposed in mirror image following disruption of left-right embryonic signaling. Most affected individuals are asymptomatic and identified incidentally, yet the reversed anatomy can mislead clinical interpretation in acute and surgical settings, and up to 20% harbor primary ciliary dyskinesia (PKD). Reports emphasize surgical and systemic implications, ocular presentations remain scarcely documented. We describe a pediatric case in which SIT was recognized during systemic workup of granulomatous panuveitis.

CASE PRESENTATION

A 7-year-old girl from central Honduras presented with decreased visual acuity in the right eye. Slit-lamp examination showed conjunctival hyperemia, 360-degree corneal neovascularization, a shallow anterior chamber, retrokeratic pigment deposits, 360-degree posterior synechiae, iris atrophy and uveitic cataract; the left eye was unremarkable. Ocular ultrasonography showed vitreous membrane formation with an attached retina and contrast-enhanced brain MRI was normal. Immunoglobulins, ANA, ANCA, MPO, and PR3 were within reference ranges; Mantoux and serology for toxoplasmosis, syphilis and cytomegalovirus were non-reactive; HSV-1 IgG was markedly elevated. Chronic granulomatous panuveitis of presumed herpetic origin was diagnosed, topical therapy was started, and she was referred for systemic evaluation.

FINDINGS

Growth and vital signs were normal, with no recurrent respiratory or cutaneous infections. The apex beat was visible in the right fifth intercostal space with louder right sided heart sounds and a systolic murmur; hepatic dullness was percussed on the left. Electrocardiography showed right axis deviation, inverted P waves in I and aVL and positive P waves in aVR. Chest radiography demonstrated dextrocardia with a right-sided aortic knuckle; abdominal radiography showed a left hepatic shadow and a right gastric bubble; abdominal ultrasonography confirmed mirror-image transposition of the viscera. Echocardiography excluded structural cardiac defects. SIT was confirmed and the family counseled. At follow-up, ocular discomfort had improved while visual acuity remained markedly reduced and treatment was maintained pending assessment of inflammatory control and surgical candidacy.

DISCUSSION AND CONCLUSION

Tuberculosis, sarcoidosis, toxoplasmosis, syphilis, cytomegalovirus, juvenile idiopathic arthritis, Behcet disease, Vogt-Koyagi-Harada syndrome and uveitis associated with inflammatory bowel disease were considered and judged unlikely on clinical and laboratory grounds; granulomatous features with markedly elevated HSV-1 IgG supported a herpetic etiology despite the absence of PCR confirmation. SIT appeared incidental, with no clinical features of PCD, making a pathophysiological link improbable. The case nonetheless carries two practical lessons: atypical pediatric ocular inflammation merits systematic multidisciplinary evaluation, which may uncover unsuspected anatomical anomalies; and recognition of SIT should prompt consideration of PCD and prevent diagnostic error in future emergency or surgical care. Limitations include the single-case design and the lack of molecular confirmation of both viral etiology and ciliary function. Reporting this rare coexistence expands the limited pediatric literature.

Cite: Solórzano Flores CE, Aguilar Castro DD, Langner-Salinas F, Hovelmeyer Jurgens CP, Mehta D. An Incidental Situs Inversus Totalis in a Pediatric Case of Granulomatous Panuveitis: A Case Report. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:054.

Abstract 055

Poster

Case report

International medical graduates

Beyond Remission: Radiation-Induced Moyamoya Syndrome After Childhood Skull-Base Rhabdomyosarcoma

Faviana Bracho, Nancy Zerpa Lira, Laura Daniela Rincon, Sabrina Martinez, Paola Martinez

Supervising author: Luis Isea Mercado

INTRODUCTION

Moyamoya syndrome is a progressive steno-occlusive arteriopathy of the terminal internal carotid arteries and circle of Willis. Cranial irradiation is a recognized cause, particularly following childhood treatment involving the parasellar region. Most reported pediatric cases occur after CNS tumors; radiation-induced moyamoya following treatment of skull-base rhabdomyosarcoma is rarely described.

CASE PRESENTATION

A 20-year-old woman treated in early childhood for skull-base head and neck rhabdomyosarcoma (surgery, chemotherapy, radiation) developed progressive left-sided deficits and recurrent cerebral ischemia. MRI showed acute and subacute right hemispheric infarctions with extensive collaterals. Angiography demonstrated chronic bilateral internal carotid artery occlusion with moyamoya collateralization, long-segment narrowing of the left cervical internal carotid artery, and severe bilateral posterior cerebral artery stenosis. Right-sided revascularization was pursued. Intraoperatively, the recipient cortical arteries were too small and fragile for direct anastomosis, so an indirect extracranial-to-intracranial revascularization using the superficial temporal artery with dural inversion was performed. Postoperatively, delayed awakening prompted imaging revealing a large right hemispheric infarction involving middle and posterior cerebral artery territories with edema and mild midline shift. She required neurocritical care with blood-pressure augmentation, hyperosmolar therapy, intracranial pressure monitoring, mechanical ventilation, and continuous EEG, which demonstrated severe encephalopathy without seizures. Neurologic examination subsequently showed gradual improvement.

DISCUSSION

This case extends a phenomenon described almost exclusively after CNS tumors to a skull-base sarcoma survivor. The convergence of childhood skull-base irradiation, progressive bilateral terminal carotid occlusion, and extensive collateralization strongly supports RIMS (Radiation Induced Moyamoya Syndrome), in which delayed endothelial injury, intimal proliferation, and fibrosis drive progressive stenosis. Reported median latency is approximately 40 months but ranges to 20 years, highlighting the importance of treatment history in adult survivors. This case also illustrates recognized perioperative vulnerabilities in advanced moyamoya. Preoperative ischemic events and posterior cerebral artery involvement are associated with increased postoperative stroke risk; posterior circulation disease may compromise leptomeningeal collateral reserve. Indirect revascularization was necessitated by unsuitable recipient vessels but depends on gradual neoangiogenesis and does not provide immediate flow augmentation. Consequently, meticulous perioperative preservation of cerebral perfusion through avoidance of hypotension, hypovolemia, hypoxemia, and hypocapnia is critical.

CONCLUSION

Radiation-induced moyamoya should be considered in young adults with cerebrovascular ischemia and remote childhood cranial or skull-base irradiation, including survivors of non-CNS malignancies. Recognition of prior radiation exposure, posterior circulation involvement, and recent ischemia can inform revascularization planning and perioperative risk assessment.

Cite: Bracho F, Zerpa Lira N, Rincon LD, Martinez S, Martinez P. Beyond Remission: Radiation-Induced Moyamoya Syndrome After Childhood Skull-Base Rhabdomyosarcoma. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:055.

Abstract 056

Poster

Case report

International medical graduates

Beyond the Ear: Otogenic Skull-Base Osteomyelitis With Central and Intracranial Extension in a Nondiabetic Older Adult

Faviana Bracho, Nancy Zerpa Lira, Laura Daniela Rincon, Sabrina Martinez, Paola Martinez

Supervising author: Luis Isea Mercado

INTRODUCTION

Skull-base osteomyelitis (SBO) is a rare, potentially life-threatening infection classically associated with necrotizing otitis externa in older adults with diabetes or immunocompromise. Typical SBO originates in the external auditory canal and temporal bone, whereas central SBO involves the clivus and sphenoid without an obvious otologic source. Otogenic infection may extend centrally to the clivus, petrous apex, prevertebral tissues, dura, meninges, and adjacent neurovascular structures. Diagnosis can be delayed because otalgia and headache are nonspecific, while fever, leukocytosis, and striking otoscopic findings may be absent. We report extensive otogenic SBO with central and intracranial extension in a nondiabetic, afebrile older adult with normal leukocyte count and a relatively benign ear examination.

CASE PRESENTATION

An older man with no history of diabetes presented with four months of progressive right otalgia, headache, dizziness, and generalized weakness despite multiple courses of outpatient antibiotics and recent myringotomy with tympanostomy tube placement. He was afebrile, neurologically intact, and had a normal leukocyte count, but inflammatory markers were markedly elevated. MRI demonstrated extensive right otomastoiditis and skull-base osteomyelitis involving the clivus and right petrous apex, with prevertebral extension to the upper cervical spine, dural and meningeal enhancement, and probable epidural phlegmon at the right cerebellopontine angle. CT demonstrated anterior clival cortical erosion with adjacent phlegmonous tissue and extensive middle-ear and mastoid opacification. Blood cultures were negative. Otolaryngologic examination showed only mild external auditory canal edema and dry debris without purulent drainage or necrosis. Multidisciplinary evaluation identified no surgically drainable collection. The patient was treated with broad-spectrum intravenous antimicrobial therapy, including antipseudomonal coverage, with clinical improvement and transition to prolonged outpatient therapy.

DISCUSSION

This case demonstrates that otogenic SBO may extend centrally and intracranially despite the absence of diabetes, fever, leukocytosis, cranial neuropathy, or significant otoscopic abnormalities. Markedly elevated inflammatory markers may provide an important diagnostic clue when systemic signs are absent. SBO may mimic skull-base malignancy, making complementary CT and MRI essential. CT is particularly useful for demonstrating cortical bone destruction, while MRI better delineates marrow, soft-tissue, and intracranial involvement. *Pseudomonas aeruginosa* is a common pathogen, although microbiologic confirmation may be absent, particularly after prior antimicrobial exposure. Prolonged antimicrobial therapy remains the cornerstone of treatment, with duration individualized according to clinical response and serial inflammatory markers.

CONCLUSION

Persistent otalgia or headache with markedly elevated inflammatory markers should prompt consideration of SBO even in nondiabetic, afebrile patients with normal leukocyte counts and relatively benign ear examinations. Early CT and MRI, combined with multidisciplinary evaluation, are critical for identifying central and intracranial extension and guiding treatment before neurologic complications develop

Cite: Bracho F, Zerpa Lira N, Rincon LD, Martinez S, Martinez P. Beyond the Ear: Otogenic Skull-Base Osteomyelitis With Central and Intracranial Extension in a Nondiabetic Older Adult. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:056.

Abstract 057

Poster

Case report

International medical graduates

Early weight-loss outcomes following swallowable intragastric balloon therapy: A three-patient case series

Yaeucly Andreina Rodriguez

BACKGROUND

Swallowable intragastric balloon therapy is a minimally invasive treatment option for adults with obesity who seek clinically meaningful weight reduction without bariatric surgery. Real-world short-term outcomes may help characterize treatment response across different baseline body mass index (BMI) categories.

METHODS / CASE PRESENTATION

We performed a descriptive case series of three adult women with obesity treated with a swallowable intragastric balloon and followed for 3 months. Baseline and 3-month body weight and BMI were recorded. Absolute weight loss and percent total body weight loss (%TBWL) were calculated for each patient.

RESULTS / FINDINGS

Mean age was 31 years. Mean baseline weight was 99.6 kg and mean baseline BMI was 40.2 kg/m². At 3 months, mean weight decreased to 79.0 kg and mean BMI to 31.9 kg/m², corresponding to a mean absolute weight loss of 20.7 kg and mean %TBWL of 20.9%. Patient 1 decreased from 109.2 to 87.2 kg (BMI 48.5 to 38.8; 20.1% TBWL). Patient 2 decreased from 80.4 to 62.4 kg (BMI 31.4 to 24.4; 22.4% TBWL). Patient 3 decreased from 109.3 to 87.3 kg (BMI 40.6 to 32.5; 20.1% TBWL).

DISCUSSION & CONCLUSION

In this three-patient case series, swallowable intragastric balloon therapy was associated with substantial early weight loss at 3 months, with approximately 20%-22% TBWL despite marked variation in baseline BMI. The consistency of response across the three patients suggests that this approach may provide meaningful short-term weight reduction across different degrees of obesity. However, the small sample size, descriptive design, and short follow-up limit generalizability and do not establish long-term effectiveness. Larger prospective studies with longer follow-up are needed to evaluate durability of weight loss, safety, and predictors of treatment response.

Cite: Rodriguez YA. Early weight-loss outcomes following swallowable intragastric balloon therapy: A three-patient case series. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:057.

Abstract 058

Poster

Case report

International medical graduates

Missed Warnings: The Silent Danger of Cerebellar Stroke

Luis Romero, Xander Ortiz Sepulveda

INTRODUCTION

Cerebellar infarcts account for roughly 2% of ischemic strokes yet carry a mortality rate near 23%. Their subtle presentation often delays diagnosis, raising the risk of life-threatening complications. Occlusion of the posterior inferior cerebellar artery (PICA) is the most common cause, typically presenting with dizziness, vertigo, and imbalance. This case illustrates the diagnostic challenge of cerebellar infarction presenting with deceptively mild initial symptoms.

CASE PRESENTATION

A 67-year-old male with hypertension and hyperlipidemia presented after a fall triggered by lightheadedness upon standing, with associated headache, nausea, blurry vision, and mild dyspnea. Given stroke concern, he received loading doses of aspirin and clopidogrel. Initial blood pressure was 161/66 mmHg, and ECG showed normal sinus rhythm with occasional PVCs.

Non-contrast head CT showed no acute abnormality, and neurology found no focal deficits, nystagmus, or ataxia. NIHSS was 0, precluding thrombolytics. Despite reassuring findings, MRI was ordered to evaluate for TIA.

Approximately 29 hours after admission, he developed worsening nausea, vomiting, headache, left facial droop, and slurred speech. Repeat CT revealed evolving left cerebellar (PICA territory) infarction with cytotoxic edema, fourth ventricle mass effect, and early hydrocephalus. Neurosurgery recommended posterior fossa decompression; however, per the family's wishes and the patient's DNR status, comfort care was pursued. He died approximately 48 hours after admission.

DISCUSSION

This case highlights the difficulty of diagnosing cerebellar infarction when patients present with nonspecific symptoms — dizziness, headache — without focal deficits. Initial non-contrast CT missed early ischemic changes, and a NIHSS of 0 masked the severity of underlying pathology.

Cerebellar strokes are frequently misdiagnosed because they mimic benign vestibular disorders. Symptoms like headache, nausea, vomiting, ataxia, and dizziness warrant a high index of suspicion, especially in patients with vascular risk factors. Given the limited sensitivity of non-contrast CT for posterior fossa infarcts, repeat imaging and close clinical reassessment are essential when symptoms evolve.

Ultimately, this case reinforces the need for vigilance with persistent dizziness, since missed cerebellar infarction can progress to brainstem compression and herniation. Meticulous history-taking, serial neurologic exams, and timely imaging remain key to early recognition and improved outcomes.

Cite: Romero L, Ortiz Sepulveda X. Missed Warnings: The Silent Danger of Cerebellar Stroke. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:058.

Abstract 059

Poster

Case report

International medical graduates

When Standard Sedation Is Not Enough: A Stepwise Anesthetic Approach for Outpatient IUD Placement in a Nonverbal Autistic Adolescent

Maria Jovita Najera Diaz, [Cielo Maria Cedeño Rocha](#)

Universidad del Norte, Colombia

BACKGROUND

Sensory hypersensitivity, anxiety, and difficulty communicating distress can make routine perioperative care especially difficult for patients with autism spectrum disorder (ASD). Pediatric ASD-specific sedation protocols have grown substantially in recent years, particularly dexmedetomidine-based and family-centered approaches for brief diagnostic procedures in younger children. However, most existing protocols address brief, single-encounter procedures in young children, commonly diagnostic imaging, rather than adolescents or reproductive health care. As nonverbal autistic patients age into adolescence, they still require routine reproductive healthcare, yet anesthesia teams have little established precedent to draw on for this population and procedure type. This case presents a stepwise IM-to-inhaled-to-IV sedation strategy developed to help close that gap.

CASE PRESENTATION

A 15-year-old nonverbal female with ASD, obesity (103 kg, ASA II), and a history of severe procedural anxiety presented for examination under anesthesia and levonorgestrel IUD placement. Previous IV access attempts had failed due to escalating distress. To prevent further agitation, she received IM midazolam 2 mg and ketamine 100 mg prior to entering the operating room, then was induced with inhaled nitrous oxide, enabling successful IV cannulation. IV induction was completed with propofol 300 mg, dexmedetomidine 24 mcg, and lidocaine 60 mg. A laryngeal mask airway was placed without difficulty. Analgesia included acetaminophen, ketorolac, dexamethasone, and ondansetron.

RESULTS

Intraoperative parameters remained largely stable (heart rate 75 to 123 bpm; MAP 65 to 95 mmHg; SpO2 95 to 100%; ETCO2 37 to 45 mmHg). The patient emerged smoothly without agitation and was discharged home the same day. Critically, the staged IM-to-inhalational approach succeeded where direct IV attempts had previously failed, demonstrating that sequencing, not just drug selection, was the key variable in achieving safe, low-distress access.

DISCUSSION & CONCLUSION

This case offers a concrete, reproducible sedation sequence tailored to a population and procedure type, adolescent and outpatient gynecologic, largely absent from current ASD anesthesia literature. The propofol-dexmedetomidine combination supported hemodynamic stability and calm emergence, reinforcing dexmedetomidine's role in minimizing emergence agitation in this population. A tailored, multimodal anesthesia approach can enhance procedural success, patient comfort, and perioperative stability in nonverbal autistic adolescents undergoing outpatient gynecologic or other invasive procedures. Development of standardized sedation pathways for neurodivergent adolescents remains an important need.

Cite: Najera Diaz MJ, Cedeño Rocha CM. When Standard Sedation Is Not Enough: A Stepwise Anesthetic Approach for Outpatient IUD Placement in a Nonverbal Autistic Adolescent. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:059.

Abstract 060

Poster

Original research

International medical graduates

A Preventable Resurgence: MMR Vaccination Gaps and Measles in the United States

Liseth Avila Morales, Joselin Navas, Ginneth Calderon, Maryandrea Lopez

Supervising author: Luis Isea Mercado

BACKGROUND

Measles was declared eliminated in the United States in 2000, yet declining measles-mumps-rubella (MMR) vaccination coverage has raised concerns about renewed transmission. National kindergarten MMR coverage declined from 95.2% in 2019–2020 to 92.4% in 2025–2026, while vaccine exemptions increased. We evaluated whether state-level MMR coverage and vaccine exemption rates were associated with measles burden during the 2026 resurgence.

METHODS

We conducted a cross-sectional ecological analysis using publicly available CDC data. State-level 2025–2026 kindergarten MMR coverage and exemption estimates from SchoolVaxView were linked with provisional 2026 National Notifiable Diseases Surveillance System measles data through August 29, 2026. Indigenous and imported cases were combined, and state incidence was calculated using population estimates. Spearman rank correlations evaluated associations between MMR coverage, exemption rates, and measles incidence. Jurisdictions without reportable vaccination data were excluded from corresponding analyses.

RESULTS

Among 49 jurisdictions with reportable MMR coverage, 39 (79.6%) had coverage below 95%. MMR coverage was weakly inversely correlated with measles incidence, but the association was not statistically significant (Spearman $\rho = -0.19$; $p = .203$). Higher exemption rates showed a positive but non-significant association with incidence ($\rho = 0.26$; $p = .066$). Disease burden was highly concentrated: South Carolina, Utah, Pennsylvania, Virginia, and Florida accounted for 2,003 of 2,665 (75.2%) provisional cases included in the analysis. MMR coverage in these states ranged from 87.2% to 93.6%. Utah had the highest incidence among these five states, approximately 150 cases per million residents, with 87.2% MMR coverage and a 12.7% exemption rate.

DISCUSSION & CONCLUSION

The 2026 U.S. measles resurgence occurred amid widespread state-level MMR coverage below the community-immunity benchmark; however, aggregate coverage alone did not predict state-level measles burden. Cases were concentrated in a small number of jurisdictions, suggesting statewide averages may obscure vulnerable local clusters. Outbreak introduction and community-level undervaccination may influence transmission. More granular analyses may better identify populations at greatest risk and guide targeted vaccination interventions.

Cite: Avila Morales L, Navas J, Calderon G, Lopez M. A Preventable Resurgence: MMR Vaccination Gaps and Measles in the United States. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:060.

Abstract 061

Poster

Original research

International medical graduates

Adverse Childhood Experiences Are Associated with Cardiovascular Risk Factors and Cardiovascular Disease Among Adults: US 2019 BRFSS Data

Carlos A. Reyes-Ortiz, Paola Vanessa Sosa Sarmiento, Richard Cristian Brito, Susan L. Delgado-Contreras, Orlando Castaño-Cifuentes, José Mauricio Ocampo-Chaparro

BACKGROUND

Adverse Childhood Experiences (ACEs) are potentially traumatic events occurring during childhood that may have long-term effects on health. Previous research suggests that ACEs may contribute to cardiovascular (CV) risk factors and cardiovascular disease later in life. This study assessed the association between ACEs and cardiovascular disease among adults in the United States and explored potential modifiable factors that may mediate this relationship.

METHODS

We analyzed data from 62,503 adults aged 18–80 years who participated in the 2019 Behavioral Risk Factor Surveillance System (BRFSS). Cardiovascular disease was defined as a self-reported history of coronary artery disease, myocardial infarction, or stroke. ACEs included three measures of childhood abuse and five measures of household dysfunction, generating a cumulative score ranging from 0 to 8. Participants were categorized as having 0–1 ACEs or ≥ 2 ACEs (poly-ACEs). Weighted logistic regression models were used to assess the association between ACE exposure and cardiovascular disease while accounting for cardiovascular risk factors. Potential mediators of the association between ACEs and cardiovascular disease were also explored.

RESULTS / FINDINGS

Participants had a mean age of 50.3 years; 51.4% were female, 9.8% reported cardiovascular disease, and 42.6% reported ≥ 2 ACEs. Among individual ACEs, living with someone who had been incarcerated, experiencing sexual abuse, and living with a household member with mental illness were associated with higher odds of cardiovascular disease. In multivariable analyses, participants with ≥ 2 ACEs had significantly higher odds of cardiovascular disease compared with those reporting 0–1 ACEs (OR 1.18, 95% CI 1.08–1.28). Poor self-rated health, depression, and smoking showed the largest proportions of mediation in the relationship between ACE exposure and cardiovascular disease.

DISCUSSION & CONCLUSION

Exposure to multiple ACEs was associated with increased odds of cardiovascular disease among U.S. adults. These findings support the potential long-term cardiovascular consequences of adverse experiences occurring early in life and highlight the importance of a life-course approach to cardiovascular health. Depression, smoking, and poor self-rated health may represent important pathways linking childhood adversity with cardiovascular disease. Clinicians assessing cardiovascular risk may benefit from considering the broader effects of childhood adversity while addressing modifiable factors, particularly smoking and depression.

Cite: Reyes-Ortiz CA, Sosa Sarmiento PV, Brito RC, Delgado-Contreras SL, Castaño-Cifuentes O, Ocampo-Chaparro JM. Adverse Childhood Experiences Are Associated with Cardiovascular Risk Factors and Cardiovascular Disease Among Adults: US 2019 BRFSS Data. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:061.

Abstract 062

★ Best Research Abstract — International Medical Graduates

Poster

Original research

International medical graduates

Clinical and Diagnostic Characteristics of Abdominal Tuberculosis in Real-World Practice: Which Diagnostic Modalities Most Frequently Establish the Diagnosis?

Maria Camila Perez Vanegas, Angie C. Perez, Johan S. Ramos, Maira A. Jimenez, Wilfredo Colmenares

Supervising author: J. K. Schloeter Rebolledo

Presented by Keyla Estefania Becerra Mogollon

Universidad de Pamplona, Colombia

BACKGROUND

Abdominal tuberculosis (TB) remains diagnostically challenging because of its nonspecific clinical presentation and variable yield of microbiologic testing. Definitive diagnosis may therefore require tissue sampling, particularly when initial testing is nondiagnostic.

METHODS

We conducted a retrospective descriptive case series of 17 adult patients (age 18 years or older) with confirmed abdominal TB evaluated at Hospital Universitario Erasmo Meoz in Cúcuta, Colombia, from 2014 to 2024. Clinical manifestations, imaging, microbiologic testing, invasive procedures, and histopathologic findings were reviewed. Diagnostic yield was described for acid-fast bacilli (AFB) smear, mycobacterial culture, molecular testing, and histopathology.

RESULTS

Presenting manifestations were nonspecific, including fever (70.6%), diarrhea (58.8%), weight loss (58.8%), ascites (35.3%), and constipation (23.5%). Imaging was positively documented in 41.2% of cases. Microbiologic testing demonstrated variable yield: AFB smear was positive in 20.0% of patients tested, culture in 50.0%, and molecular testing in 71.4%. In 10 of 17 cases (58.8%), no microbiologic test established the diagnosis. An invasive diagnostic procedure was performed in 14 patients (82.4%). Histopathologic evaluation was obtained in 16 patients (94.1%) and demonstrated diagnostic findings in all 16 (100%). Granulomatous inflammation and intra-abdominal adhesions were identified in 10 (58.8%) and 11 (64.7%) patients, respectively.

CONCLUSION

Abdominal TB presented with nonspecific clinical manifestations and variable microbiologic diagnostic yield in this cohort. Tissue-based evaluation was central to definitive diagnosis, particularly when microbiologic testing was nondiagnostic. These findings highlight the importance of maintaining clinical suspicion for abdominal TB in adult patients with unexplained abdominal disease and considering tissue diagnosis when initial microbiologic evaluation does not establish the diagnosis.

Cite: Perez Vanegas MC, Perez AC, Ramos JS, Jimenez MA, Colmenares W. Clinical and Diagnostic Characteristics of Abdominal Tuberculosis in Real-World Practice: Which Diagnostic Modalities Most Frequently Establish the Diagnosis?. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:062.

Abstract 063

Poster

Original research

International medical graduates

Clinical and Epidemiological Characteristics of Anemia in Adolescent and Adult Pregnancies in Coastal Ecuador

Pamela Delgado Granda, Juan Izquierdo Condoy, María Paula Pineda, Shirley Maldonado Rodríguez

Presented by Sofía Chicaiza Erazo

Universidad de Las Américas (UDLA), Quito, Ecuador

BACKGROUND

Anemia during pregnancy remains a significant public health concern, particularly in underserved populations. Adolescent pregnancies may involve unique biological and social vulnerabilities, yet clinical and epidemiological characteristics of anemia in adolescent and adult pregnancies remain insufficiently described in Ecuadorian primary care settings. This study compared sociodemographic, anthropometric, hematologic, and antenatal care characteristics among adolescent and adult pregnant women with anemia in coastal Ecuador.

METHODS

A retrospective cross-sectional study was conducted using medical records from 23 public primary healthcare centers in Quinindé, Esmeraldas Province, Ecuador. Records from January 2024 to December 2025 were reviewed. The study included pregnant women aged 10–44 years with documented anemia, at least one hemoglobin measurement, and available information on iron–folic acid supplementation and antenatal care visits. Adolescents were defined as women aged 10–19 years and adults as those aged ≥ 20 years. Anemia was defined as hemoglobin < 11 g/dL according to World Health Organization criteria. Sociodemographic, anthropometric, obstetric, and laboratory variables were compared using chi-square, Fisher's exact, and Mann–Whitney U tests, as appropriate.

RESULTS

Among 2,174 pregnant women with anemia, 810 (37.3%) were adolescents and 1,364 (62.7%) were adults. Adolescents had a higher proportion of rural residence than adults (74.3% vs 68.5%, $p=0.005$). They also had lower median weight (60.80 vs 67.07 kg) and body mass index (25.25 vs 27.95 kg/m²; both $p<0.001$). Median hemoglobin was 10.20 g/dL in both groups, although hemoglobin distributions differed significantly ($p=0.036$). Most participants had mild anemia (67.6%), followed by moderate (32.1%) and severe anemia (0.3%), with no significant difference in anemia severity between groups ($p=0.083$). Iron–folic acid supplementation was recorded in 86.5% of adolescents and 86.6% of adults ($p=0.999$). No significant differences were observed in gestational age at evaluation or antenatal care visits.

DISCUSSION & CONCLUSION

Among pregnant women with established anemia receiving primary care, adolescents were more frequently from rural areas and had lower weight and body mass index than adults. However, anemia severity, median hemoglobin levels, iron–folic acid supplementation, and antenatal care indicators were broadly similar between groups. These findings underscore the importance of incorporating sociodemographic and anthropometric characteristics into adolescent-focused prenatal care strategies in underserved settings. The retrospective cross-sectional design and inclusion of only women with documented anemia limit causal interpretation and the assessment of anemia risk by age. Further research is needed to investigate nutritional and social determinants of anemia among pregnant adolescents.

Cite: Delgado Granda P, Izquierdo Condoy J, Pineda MP, Maldonado Rodríguez S. Clinical and Epidemiological Characteristics of Anemia in Adolescent and Adult Pregnancies in Coastal Ecuador. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:063.

Abstract 064

Poster

Original research

International medical graduates

Confident but conflicting: Discordance among generative artificial intelligence systems in acute myeloid leukemia decision-making

Zara Baloch, Diksha Sanjana Pasnoor, Adeena Musheer, Tuba Basit, Ayesha Junaid, Alicia Fong, Arturo Loaiza-Bonilla, Yan Leyfman, Chandler Park

BACKGROUND

Generative artificial intelligence (AI) tools are increasingly used by clinicians to answer complex medical questions and support clinical decision-making. Their responses are often delivered with apparent confidence, potentially encouraging users to equate certainty or reproducibility with reliability. However, different AI systems may interpret the same clinical information differently. We evaluated whether commonly used generative AI systems provide consistent treatment recommendations, how frequently different systems agree, and whether disagreement is appropriately reflected by lower confidence.

METHODS

We developed 20 clinical scenarios in acute myeloid leukemia spanning complex management decisions, including transplantation, measurable residual disease, post-remission therapy, germline evaluation, treatment following hypomethylating agent plus venetoclax failure, and relapsed disease. Four generative AI systems, ChatGPT (GPT-5.5 Instant), Claude (Sonnet 5), Gemini (3.5 Flash), and OpenEvidence, independently evaluated each scenario three times using standardized prompts in fresh sessions. Four hematologists independently reviewed the same scenarios. In total, 240 AI and 80 physician responses were analyzed. Outcomes included within-model reproducibility, pairwise agreement between AI systems, four-system concordance, physician agreement, and the frequency of conflicting AI recommendations accompanied by high reported confidence.

RESULTS

Within-model reproducibility varied substantially across AI systems. Exact repeatability across three independent attempts was 65.0% for ChatGPT, 95.0% for Claude, 100.0% for Gemini, and 90.0% for OpenEvidence. Despite high reproducibility for several systems, agreement between different AI systems was considerably lower. Overall pairwise agreement was 69.2% (95% CI, 54.2% to 83.3%), and all four systems selected the same recommendation in only 50.0% of clinical scenarios. Hematologists reached consensus in 50.0% of scenarios, with unanimous agreement in 15.0%. Among the 10 scenarios in which AI systems disagreed, six contained at least one pair of conflicting recommendations for which both systems nevertheless reported high confidence.

DISCUSSION & CONCLUSION

These findings demonstrate an important distinction between reproducibility and agreement in clinical AI. A system may repeatedly generate the same recommendation without that recommendation being shared by other AI systems evaluating identical clinical information. Importantly, disagreement was not consistently accompanied by lower confidence. Multiple systems could simultaneously express high confidence while recommending opposing management strategies. Confidence and reproducibility should therefore not be interpreted as proxies for clinical reliability. As AI tools become increasingly integrated into clinical medicine, clinicians should prioritize independent clinical validation rather than relying on apparent certainty or consistency. Cross-model confident disagreement may represent a simple, clinically meaningful warning signal identifying decisions that warrant heightened physician review.

Cite: Baloch Z, Pasnoor DS, Musheer A, et al. Confident but conflicting: Discordance among generative artificial intelligence systems in acute myeloid leukemia decision-making. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:064.

Abstract 065

Poster

Original research

International medical graduates

Diagnostic Overlap of Pompe Disease and Myotonic Dystrophy Type 1 in an Adult Patient: A Case Report

Carolina Rivera, Carlos-Eduardo Guerrero-Chalela, Silvia Juliana Maradei-Anaya, Istria Beatriz Barros Valderrama

Fundación Cardioinfantil – Instituto de Cardiología; Universidad del Rosario, Bogotá, Colombia

BACKGROUND

Pompe disease and myotonic dystrophy type 1 are inherited neuromuscular disorders that can both cause progressive weakness and respiratory compromise. Their overlapping phenotypes can obscure a second diagnosis, particularly when an initial workup appears to explain the presentation. We report an adult patient in whom findings supporting Pompe disease and myotonic dystrophy type 1 were identified concurrently.

CASE PRESENTATION

A 34-year-old woman presented with frequent falls, distal-predominant weakness, upper-limb stiffness, dyspnea, and impaired daily functioning. Examination demonstrated ptosis, myotonia, generalized weakness with severe distal involvement, Gowers sign, and steppage gait. Respiratory testing suggested diaphragmatic weakness. A dried-blood-spot assay screened positive for reduced acid alpha-glucosidase activity. GAA sequencing identified the pathogenic c.-32-13T>G variant in the heterozygous state, and leukocyte testing showed markedly reduced GAA activity. Enzyme replacement therapy with alglucosidase alfa was initiated. Electromyography demonstrated myopathic motor units and myotonic discharges. A brother with a similar phenotype was subsequently diagnosed with myotonic dystrophy type 1 after DMPK testing detected an allele with more than 100 CTG repeats. Given the family history, myotonia, and persistent weakness despite therapy, the patient underwent DMPK testing, which also detected an allele with more than 100 CTG repeats.

FINDINGS

The combined clinical, electrophysiologic, enzymatic, and molecular findings supported diagnoses of Pompe disease and myotonic dystrophy type 1 in the same patient. Alglucosidase alfa improved fatigue, but weakness persisted. Repeat leukocyte testing continued to show reduced GAA activity.

DISCUSSION AND CONCLUSION

This case illustrates how phenotypic overlap between neuromuscular disorders can delay recognition of a coexisting condition. Persistent or discordant findings should prompt reassessment even after an initial diagnosis. Family evaluation and targeted molecular testing were decisive in identifying myotonic dystrophy type 1 and refining the interpretation of ongoing weakness. A systematic approach combining phenotype, family history, electrophysiology, enzyme assays, and genetic testing may reduce diagnostic anchoring in patients with complex neuromuscular presentations.

Cite: Rivera C, Guerrero-Chalela CE, Maradei-Anaya SJ, Barros Valderrama IB. Diagnostic Overlap of Pompe Disease and Myotonic Dystrophy Type 1 in an Adult Patient: A Case Report. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:065.

Abstract 066

Poster

Original research

International medical graduates

Financial Toxicity and Depression among Florida Hispanics: Comparing Pre-pandemic (2017–2018) and Post-pandemic (2022–2023) Cohorts

Miguel Enrique Sanchez Hechavarria

Presented by Carlos Acosta Batista

Primary Care Research Initiative (PCRI)

BACKGROUND

Financial toxicity is a critical social determinant of health, yet its impact on Hispanic psychiatric resilience remains undercharacterized. This study aims to quantify the association between financial toxicity and depression among Florida Hispanic adults, examining the modifying role of age across pre-pandemic (2017–2018) and post-pandemic (2022–2023) cohorts.

METHODS / CASE PRESENTATION

A repeated cross-sectional analysis was conducted using CDC Behavioral Risk Factor Surveillance System (BRFSS) data for Florida. Financial toxicity was defined as the inability to afford medical care. Disparities were quantified using Mantel-Haenszel adjusted odds ratios (aOR). To stabilize post-pandemic sample variance, a Bayesian parameter estimation was implemented, utilizing pre-pandemic risk as an informative prior to calculate Posterior Odds Ratios and 95% Credible Intervals (CrI).

RESULTS / FINDINGS

Overall, financial toxicity doubled the odds of psychiatric morbidity (aOR=2.00). Post-2020, this association was mitigated among young Hispanic adults (18–24 years), demonstrating strong post-pandemic resilience (Posterior OR=1.64). Conversely, in the geriatric cohort (≥ 65 years), economic insolvency emerged as a severe exacerbating factor (Posterior OR=2.74), quadrupling the crude odds of clinical depression in this subgroup.

DISCUSSION & CONCLUSION

The cultural shield of the "Hispanic Paradox" is highly permeable to structural economic disparities. While young adults demonstrated post-pandemic resilience, economic insolvency shattered the psychiatric safety nets of older Hispanics. It is imperative to implement routine primary care screening to identify financial barriers in geriatric populations, preventing healthcare access disparities from calcifying into psychiatric morbidity.

Cite: Sanchez Hechavarria ME. Financial Toxicity and Depression among Florida Hispanics: Comparing Pre-pandemic (2017–2018) and Post-pandemic (2022–2023) Cohorts. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:066.

Abstract 067

Poster

Original research

International medical graduates

Marital Status and the Hispanic Paradox in Mental Health: Identifying High-Risk Phenotypes for Depression in Florida

Miguel Enrique Sanchez Hechavarria

Presented by Carlos Acosta Batista

Primary Care Research Initiative (PCRI)

BACKGROUND

The "Hispanic Paradox" posits that Hispanic populations exhibit better health outcomes despite socioeconomic disadvantages, a resilience frequently attributed to family cohesion and "familismo". This study evaluates whether this epidemiological advantage persists among adults experiencing spousal loss.

METHODS

A complex-survey cross-sectional logistic regression and Bayesian analysis were conducted using pooled 2022–2024 Florida BRFSS data (N=38,197). The model adjusted for sex, age category, race/ethnicity, and marital status to evaluate lifetime depression prevalence. A Bayesian Beta-Binomial model with a Jeffreys Prior was employed to confirm clinical phenotypes within small demographic intersections.

RESULTS / FINDINGS

Marriage demonstrated a universal protective effect, whereas separation (aOR 2.32) and divorce (aOR 2.05) presented the highest psychiatric risk penalties. The Hispanic Paradox was validated globally (aOR 0.70). However, the phenotype of "Premature Hispanic Widowhood" (ages 45–64) exhibited an extreme lifetime depression prevalence of 57.2%. Bayesian modeling confirmed this severe disparity against married counterparts with greater than 99.9% statistical certainty.

DISCUSSION & CONCLUSION

The robust psychiatric advantage typically observed in Hispanic populations completely disappears in the context of premature widowhood. Spousal loss before retirement age catastrophically fractures cultural support networks. This high-burden phenotype requires public health strategies to move beyond traditional additive models and prioritize targeted psychiatric screening alongside culturally integrated mental health support.

Cite: Sanchez Hechavarria ME. Marital Status and the Hispanic Paradox in Mental Health: Identifying High-Risk Phenotypes for Depression in Florida. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:067.

Abstract 068

Poster

Original research

International medical graduates

Rethinking the Access Gap: GLP-1 Injectable Use Among Hispanic Adults With Diabetes in the United States

Liseth Avila Morales, Joselin Navas, Ginneth Calderon, Maryandrea Lopez

Supervising author: Luis Isea Mercado

BACKGROUND

Glucagon-like peptide-1 (GLP-1)-based therapies have transformed diabetes and obesity management, but concerns remain about equitable access. Contemporary national data on GLP-1 utilization among Hispanic adults with diabetes are limited. We examined racial/ethnic patterns and clinical and socioeconomic correlates of injectable GLP-1 use among U.S. adults with diagnosed diabetes.

METHODS

We conducted a cross-sectional secondary analysis of the 2024 National Health Interview Survey. Adults aged ≥ 18 years with diagnosed diabetes and a valid response regarding current non-insulin injectable medication use to lower blood glucose or body weight were included. Analyses included Hispanic, non-Hispanic White, non-Hispanic Black, and non-Hispanic Asian adults. Survey weights, strata, and primary sampling units were incorporated. Weighted prevalence and 95% confidence intervals were calculated. Survey-weighted multivariable logistic regression adjusted for age, sex, body mass index, insurance, education, and family poverty ratio. A sensitivity analysis was restricted to type 2 diabetes.

RESULTS

Among 3,573 adults with diagnosed diabetes, 566 were Hispanic. Weighted GLP-1 use was 31.3% (95% CI, 25.6–37.1) among Hispanic, 26.2% (24.0–28.3) among non-Hispanic White, 26.5% (21.3–31.8) among non-Hispanic Black, and 12.1% (6.7–17.5) among non-Hispanic Asian adults. In adjusted analysis ($n=3,474$), Hispanic adults had higher odds of GLP-1 use than non-Hispanic White adults (aOR 1.50; 95% CI, 1.10–2.04; $p=.010$). Obesity (aOR 2.25; 1.65–3.07; $p<.001$), some college/associate education (aOR 1.38; 1.08–1.75; $p=.009$), and bachelor's degree or higher (aOR 1.38; 1.06–1.79; $p=.018$) were associated with greater use. Insurance and family poverty ratio were not independently associated. In the type 2 diabetes sensitivity analysis ($n=2,914$), the Hispanic-White association attenuated (aOR 1.37; 0.98–1.92; $p=.066$).

DISCUSSION & CONCLUSION

Hispanic adults with diagnosed diabetes had relatively high GLP-1 utilization in 2024. The adjusted Hispanic-White difference weakened after restriction to type 2 diabetes, suggesting a more nuanced pattern than a simple access-gap framework. Clinical indication and education may contribute to utilization, while insurance and family poverty ratio alone did not explain observed differences. Future studies should examine affordability, prescribing, and treatment persistence.

Cite: Avila Morales L, Navas J, Calderon G, Lopez M. Rethinking the Access Gap: GLP-1 Injectable Use Among Hispanic Adults With Diabetes in the United States. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:068.

Abstract 069

Poster

Public health project

International medical graduates

The Rise of Pediatric E-Scooter-Related Injuries: Risk Factors and Regulatory Considerations

Jose Enrique Marino, Chadwick Flowers

University of Miami, Department of Neurosurgery

BACKGROUND

The increasing use of electric scooters (e-scooters) among children and adolescents has become an emerging pediatric public health concern. As e-scooter use has expanded, injuries among young riders have also increased, with fractures and head injuries representing important causes of emergency department visits. Modifiable risk factors, including helmet nonuse and alcohol or substance use while riding, may further contribute to injury risk. This review examines recent trends in pediatric e-scooter-related injuries and associated behavioral and safety risk factors, with particular consideration of the potential role of preventive regulations.

METHODS

A review of recent peer-reviewed literature examining e-scooter-related injuries among children and adolescents was conducted. Studies using national injury surveillance databases and clinical data were evaluated for injury trends, mechanisms of injury, anatomic injury patterns, helmet use, and alcohol or substance involvement. Evidence regarding potential injury prevention strategies and regulatory measures was also examined.

RESULTS

Recent U.S. data demonstrate a significant increase in pediatric e-scooter-related injuries. National surveillance data from 2014–2023 demonstrated an approximately 2.4-fold increase in the average annual number of pediatric injuries during 2021–2023 compared with 2014–2019. Falls were the predominant mechanism of injury, while fractures were among the most frequently reported diagnoses, and the head was the most commonly injured body region. Among cases in which helmet use was documented, the majority of pediatric patients were not wearing a helmet. Emerging national data also demonstrates an association between e-scooter-related injuries and alcohol or other substance use among adolescents.

DISCUSSION & CONCLUSION

The increasing frequency of pediatric e-scooter-related injuries highlights an important and potentially preventable public health concern. Helmet nonuse and substance-associated riding represent modifiable risk factors that warrant greater attention in pediatric injury prevention. Although additional research is needed to determine the effectiveness of specific interventions, current evidence supports consideration of stronger safety measures, including helmet requirements, age restrictions, prevention of impaired riding, and improved rider education. Establishing and enforcing evidence-based regulations, together with community and clinical education, may help reduce preventable e-scooter-related injuries among children and adolescents.

Cite: Marino JE, Flowers C. The Rise of Pediatric E-Scooter-Related Injuries: Risk Factors and Regulatory Considerations. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:069.

Abstract 070

Poster

Original research

International medical graduates

When IVIG Is Not Enough: Plasma Exchange Rescue in Myasthenic Crisis

Keyla Estefania Becerra Mogollon, Faviana Bracho, Salma Fakhouri, Ginneth Calderon, Sabrina Martinez

Supervising author: Luis Isea Mercado

INTRODUCTION

Myasthenic crisis is a life-threatening exacerbation of myasthenia gravis (MG) characterized by respiratory or bulbar weakness requiring ventilatory support. Infection is a common precipitant. Intravenous immunoglobulin (IVIG) and plasma exchange (PLEX) are the main rapid immunomodulatory therapies. Although comparative trials suggest broadly similar efficacy, expert consensus suggests that PLEX may act more rapidly and may be more effective in severe crisis. When clinical deterioration occurs despite recent IVIG, prompt reassessment and transition to an alternative rescue strategy may be warranted.

CASE PRESENTATION

An 80-year-old man with longstanding MG, dysphagia, obstructive sleep apnea, hypertension, hyperlipidemia, and heart failure with preserved ejection fraction presented with worsening fatigue, generalized weakness, blurred vision, dysphagia, and dyspnea shortly after a hospitalization for an MG exacerbation treated with IVIG. Although he initially improved following IVIG, his symptoms recurred after discharge, prompting readmission. During hospitalization, he developed rapidly progressive respiratory distress and hypoxemia requiring emergent endotracheal intubation. Neurologic examination demonstrated ptosis and persistent weakness, and his deterioration was considered consistent with myasthenic crisis. Chest CT demonstrated extensive secretions filling the left lower-lobe bronchus with complete left lower-lobe atelectasis and additional right lower-lobe mucus plugging. Urine culture grew greater than 100,000 CFU/mL of *Pseudomonas aeruginosa*, representing a potential infectious contributor to his exacerbation without documented sepsis. Given recurrent respiratory and bulbar symptoms despite recent IVIG and a history of favorable response to plasmapheresis, the treatment strategy was changed to PLEX. Nephrology initiated a planned five-treatment course. After the first plasma exchange, his respiratory status improved sufficiently for extubation the following day, with good respiratory effort and continued clinical improvement. Subsequently, he was sitting in a chair, reported symptomatic improvement, and demonstrated a negative inspiratory force of approximately -50 cm H₂O and vital capacity of 1.3 L while receiving low-flow supplemental oxygen.

DISCUSSION

This case highlights the importance of reassessing the therapeutic approach when myasthenic crisis progresses despite recent IVIG. Although IVIG and PLEX are both accepted rescue therapies, inadequate response to one modality should not preclude timely use of the other when respiratory or bulbar weakness continues to worsen. Limited prior evidence describes successful PLEX rescue after IVIG failure, and in this patient, transition to PLEX was followed by rapid respiratory improvement and extubation. The case also illustrates the multifactorial nature of respiratory deterioration in MG, in which infection, impaired secretion clearance, atelectasis, and neuromuscular weakness may coexist. Management requires identification and treatment of potential precipitants alongside disease-directed therapy. Serial respiratory mechanics may assist in monitoring but should be interpreted in clinical context, particularly in patients with bulbar weakness. Early recognition of treatment failure and timely escalation to an alternative rescue therapy may reduce the morbidity associated with prolonged myasthenic crisis.

Cite: Becerra Mogollon KE, Bracho F, Fakhouri S, Calderon G, Martinez S. When IVIG Is Not Enough: Plasma Exchange Rescue in Myasthenic Crisis. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:070.

Abstract 071

Poster

Original research

International medical graduates

When Muscle Enzymes Understate the Disease: Anti-NXP2-Positive Dermatomyositis with Progressive Dysphagia

Keyla Estefania Becerra Mogollon, Jenny K. Becerra Mogollon, Katherine I. Fiol Olivero

BACKGROUND

Anti-nuclear matrix protein 2 (NXP2)-positive dermatomyositis (DM) is associated with a clinically important phenotype that may include prominent muscle involvement and dysphagia. Early recognition can be challenging when cutaneous manifestations precede or initially overshadow systemic symptoms. We present a newly diagnosed case of anti-NXP2-positive DM in which evolving characteristic skin findings, proximal weakness, and progressive dysphagia prompted recognition of an inflammatory myopathy despite only modest creatine kinase elevation.

CASE PRESENTATION

A 54-year-old woman presented to rheumatology with a progressive rash, myalgias, proximal weakness, and dysphagia. Her symptoms began with a pruritic erythematous eruption involving the fingers that subsequently spread to the hands, elbows, upper chest, and face, with reported prior periorbital involvement. The eruption was initially treated as eczema with topical corticosteroids and a two-week course of systemic prednisone, resulting in partial cutaneous improvement. She subsequently reported deep muscle discomfort with activity and progressive dysphagia, initially to solids and later to both solids and liquids. At rheumatology evaluation, approximately two weeks after completing systemic corticosteroids, examination demonstrated Gottron papules/sign, heliotrope rash, and Shawl sign. Strength was reduced to 4+/5 in the bilateral deltoids and hip flexors.

Laboratory evaluation demonstrated a high-titer antinuclear anti-body (>1:2560) with a nuclear dot pattern and isolated anti-NXP2 positivity on an extended myositis panel. Creatine kinase was modestly elevated at 352 U/L, with mild AST elevation and no substantial elevation of systemic inflammatory markers. Integration of the characteristic cutaneous findings, objective proximal weakness, symptoms, and serology supported a diagnosis of anti-NXP2-positive dermatomyositis. High-dose prednisone and mycophenolate mofetil were initiated, with intravenous immunoglobulin under consideration if dysphagia or overall disease control remains inadequate. Given the diagnosis of adult-onset DM, CT imaging of the chest, abdomen, and pelvis and age-appropriate cancer screening were initiated.

DISCUSSION

Dermatomyositis may initially resemble common dermatologic conditions, delaying recognition of systemic disease. In this case, the evolution from predominantly cutaneous manifestations to objective proximal weakness and progressive dysphagia, together with anti-NXP2 positivity, supported the diagnosis despite modest CK elevation. This presentation underscores the importance of integrating the evolving clinical phenotype with physical examination, muscle enzymes, and myositis-specific antibodies rather than relying on CK levels alone. Progressive dysphagia warrants close monitoring because it may reflect clinically significant muscle involvement. In adults with newly diagnosed DM, assessment of malignancy risk and appropriate cancer screening should also be incorporated into the evaluation.

CONCLUSION

This case demonstrates that dermatomyositis should remain in the differential diagnosis when characteristic cutaneous findings evolve alongside proximal muscle weakness or dysphagia, even when CK elevation is modest. Recognition of the evolving clinical phenotype and appropriate use of myositis-specific antibodies may facilitate timely diagnosis, treatment, and evaluation for associated complications.

Cite: Becerra Mogollon KE, Becerra Mogollon JK, Fiol Olivero KI. When Muscle Enzymes Understate the Disease: Anti-NXP2-Positive Dermatomyositis with Progressive Dysphagia. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:071.

Abstract 072

Poster

Original research

International medical graduates

When the Optic Nerve Can't Tell the Whole Story: Longitudinal Glaucoma Assessment in Ocular Coloboma

Raquel G. Quintanilla, Johar Abbas, Eleonore Savatovsky, Elena Bitrian

University of Miami

BACKGROUND

Ocular coloboma is a congenital malformation that can threaten vision through macular, optic disc, and retinal involvement. Its relationship to ocular hypertension (OHT) and glaucoma is poorly characterized, and coloboma-related anatomic changes may limit conventional glaucoma assessment. We characterized glaucoma-related diagnoses, longitudinal IOP control, and surgical outcomes in a coloboma cohort.

METHODS

We performed a retrospective chart review of patients with congenital ocular coloboma subsequently diagnosed with ocular hypertension (OHT), glaucoma suspect status (GSS), or glaucoma at a single tertiary referral center between January 2010 and November 2021. Baseline demographics and clinical data was collected, as well as follow-up/post-treatment intraocular pressure (IOP), visual acuity (VA), and management strategy (observation, medication, or surgery). Descriptive statistics summarized baseline and outcome variables. Kaplan-Meier analysis estimated IOP-control survival, stratified by OHT/GSS versus glaucoma status, and surgery-free survival among eyes initially managed non-surgically.

RESULTS

Among 22 patients (35 coloboma-affected eyes) baseline mean age was 19.4 ± 6.0 years, VA was 1.37 ± 1.01 logMAR, and pre-treatment IOP was 26.8 ± 9.2 mmHg. Out of 35 colobomatous eyes 16 (46%) were classified as OHT/GSS and 10 (29%) as glaucoma; cup-to-disc ratio (C/D) could not be assessed in 22 (63%) eyes. Management consisted of observation in 16 (46%) eyes, antiglaucoma medication in 14 (40%), and glaucoma surgery in (14%). Among the 26 eyes with an OHT/glaucoma-spectrum diagnosis, Kaplan-Meier analysis showed a median IOP-control survival of 3.9 years in the OHT/GSS group, 75% maintaining IOP control at year 2 and 50% at year 4. In the glaucoma group, fewer than half of eyes lost IOP control during follow-up and 60% maintained IOP control at year 6. Among the 21 eyes initially managed non-surgically, median surgery-free survival was 5.5 years.

DISCUSSION

Coloboma-related involvement of the macula and optic disc limits the reliability of conventional glaucoma metrics, making IOP trends a central, though imperfect, monitoring tool. The earlier loss of IOP control among OHT/GSS eyes suggests that diagnostic uncertainty in coloboma may contribute to under-treatment, while the high eventual conversion to surgery highlights the limits of medical therapy alone in this population.

CONCLUSION

Coloboma carries a substantial burden of glaucoma-spectrum disease that is difficult to assess with standard structural and functional metrics. Long-term, individualized IOP-based monitoring with a low threshold for treatment escalation is warranted. Larger prospective multicenter studies are needed to clarify risk stratification and optimal surveillance in this population.

Cite: Quintanilla RG, Abbas J, Savatovsky E, Bitrian E. When the Optic Nerve Can't Tell the Whole Story: Longitudinal Glaucoma Assessment in Ocular Coloboma. Poster presented at: NHMA Florida Chapter Inaugural Annual Meeting; October 10, 2026; Coral Gables, FL. In: Research Competition Abstracts. NHMA Florida Chapter; 2026:072.

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