C01

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Use of Anticoagulants as a Supportive Measure in Patients with Pulmonary Hypertension

Pulmonary hypertension (PH) is a heterogeneous and progressive disorder associated with substantial morbidity and mortality. Thrombotic remodeling of the pulmonary vasculature contributes to disease progression, particularly in pulmonary arterial hypertension (PAH), generating interest in anticoagulation as adjunctive therapy. However, the efficacy and safety of anticoagulation across PH subtypes remain controversial. This review evaluates the pathophysiologic rationale and clinical evidence supporting anticoagulant use across all five World Health Organization PH groups.

A structured literature review was conducted using PubMed, Cochrane Library, and Google Scholar to identify peer reviewed clinical trials, observational studies, and meta analyses assessing anticoagulation in PH. Outcomes of interest included survival, thromboembolic events, hemodynamics, and bleeding complications. Data were synthesized narratively across PH subgroups.

Observational studies suggest a possible survival benefit of vitamin K antagonists in idiopathic PAH, though findings are inconsistent, and some registries report increased bleeding without clear mortality reduction, particularly in connective tissue disease associated PAH. There is no evidence supporting routine anticoagulation in PH due to left heart disease or lung disease unless another indication such as atrial fibrillation or venous thromboembolism exists. In contrast, chronic thromboembolic pulmonary hypertension remains a clear indication for lifelong anticoagulation. Data in group 5 PH are limited and decisions are individualized based on underlying prothrombotic conditions.

Overall, anticoagulation in PH requires careful risk benefit assessment guided by disease subtype and comorbidities. Prospective randomized trials and PH specific risk stratification tools are needed to clarify the role of anticoagulation and support precision-based care.

C02

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The Forgotten Port: Destructive Mitral Valve Endocarditis in a Man with Advanced HIV

Culture-negative infective endocarditis (IE) presents a diagnostic and management challenge, particularly in immunocompromised patients with indwelling vascular devices and fragmented longitudinal care.
We report a case of destructive mitral valve endocarditis in a 61-year-old man with advanced HIV non adherent to HAART, polysubstance use disorder, hypertension, and heart failure with preserved ejection fraction (LVEF 60%).
The patient was diagnosed with HIV over 20 years ago when he was started on HAART. He was consistently non adherent to his medications and his HIV course was complicated by Kaposi's sarcoma (KS). He underwent chemo port placement for management of KS. Following chemotherapy, the patient remained non adherent to follow up and as he was incarcerated in the interim, persisted with the chemo port in place. History was indicative of chemo port use for illicit drug injection. 9 years later, he was admitted frequently for CHF exacerbations, each time presenting with shortness of breath and bilateral pedal edema. Worsening frequency and rapid onset of symptoms suggested flash pulmonary edema. Transthoracic echocardiography and transesophageal echocardiography revealed multiple vegetations on the retained chemoport and the native mitral valve. These vegetations had resulted in perforation of the mitral valve and severe mitral regurgitation. Infectious disease workup as per chart review remained negative.
In this case, we highlight the importance of regular follow-up and the compounded risk of retained intravascular devices in immunocompromised patients with disrupted continuity of care.

C03

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A uremic sheep model of neointimal hyperplasia

Introduction
Neointimal hyperplasia (NIH), defined as the accumulation of smooth muscle cells in the intima of the vessel wall is a principal mechanism of vascular access stenosis and failure in hemodialysis (HD) patients. It is cause by injury and mechanical factor of flow and pressure but also the effect of uremia which promotes endothelial dysfunction, oxidative stress and inflammation. To date, there is no uremic large animal model of NIH that can be used to study NIH.
Methods
Renal failure was induced in two sheep via bilateral renal artery ligation to establish a uremia HD was performed three times weekly for 4 weeks via tunneled central venous catheter access. An arteriovenous graft was surgically created to permit evaluation of NIH. During dialysis, markers of renal function, hematological and inflammatory parameters, iron levels were measured. Tissue samples of the graft were collected for analysis of NIH after euthanasia.
Results
Both sheep developed severe uremia, with creatinine levels exceeding 13 mg/dL and blood urea nitrogen (BUN) exceeding 150 mg/dL, confirming successful induction of ESRD physiology. HD clearance was >70% at each dialysis for both sheep. Progressive microcytic hypochromic anemia developed in both sheep, with hemoglobin near 4 g/dL and markedly reduced ferritin levels consistent with iron deficiency anemia. One sheep developed catheter-associated infection during the dialysis course and responded to antibiotic therapy. Thickening of the intimal-media was observed within 4 weeks at the venous outflow segment, venous stenosis had occurred by 30%. Lesions at the venous site were significantly thicker than at the arterial site.
Conclusion
We successfully developed a uremic sheep model of neointimal hyperplasia that underwent successful HD for 4 weeks and ability to excise and study NIH. This model will enable research into NIH therapy in a uremic environment.

C04

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Navigating Continuous Glucose Monitoring Adoption in Primary Care: A Resident-Centric Approach

Background
In our diverse, resident-run primary care clinic at Kings County in Central Brooklyn, approximately one-third of diabetes patients had A1c >8%. Continuous Glucose Monitoring (CGM) is a tool proven to improve glycemic control and engagement. However, adoption of CGM devices remains low among primary care providers and patients. This pilot study aimed to identify and address provider-related barriers to CGM prescribing among internal medicine residents.
Methods
Thirty-eight residents completed anonymous pre- and post-intervention surveys. The intervention included didactic training on CGM indications and prescribing logistics, plus hands-on experience wearing CGM devices. Paired ordinal outcomes were analyzed using Wilcoxon signed-rank test; paired binary outcomes used exact binomial tests. Statistical significance was $p<0.05$ (JASP).
Results
Significant improvements occurred across multiple domains. Behavioral metrics showed residents discussed CGMs more frequently while precepting (mean 0.684 vs 0.895, W=19.5, p=0.050) and with patients (0.500 vs 0.763, W=22.5, p=0.020). Confidence measures improved substantially: likelihood of discussing CGM (1.947 to 2.684, W=33.5, $p<0.001$), prescribing confidence (1.474 to 2.763, W=6.0, $p<0.001$), comfort with new technologies (2.132 to 2.842, W=28.5, $p<0.001$), and technical comfort (1.500 to 2.921, W=27.0, $p<0.001$). Rank-biserial correlations ranged from -0.777 to -0.972, indicating large effect sizes. Knowledge improvements were modest due to high baseline scores.
Conclusions
An educational intervention combining didactics with experiential CGM use significantly improved residents' comfort, confidence, and discussion frequency. While knowledge improvements were limited due to already high baseline knowledge, the intervention effectively addressed confidence and behavioral barriers. Integrating experiential learning into residency training may enhance CGM adoption and diabetes care in safety-net settings.

C05

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A Case of Syncope as an Atypical Presentation of LÃ¶fgren Syndrome Mimicking Lymphoma in a Hispanic Male

Introduction:
LÃ¶fgren syndrome (LS) is an acute variant of sarcoidosis characterized by the classic triad of erythema nodosum, polyarthritis, and bilateral hilar lymphadenopathy. Syncope is a rare presenting symptom of LS and may obscure recognition of the underlying inflammatory process.
Case:
A 33-year-old Hispanic male presented after a syncopal episode while taking a hot shower. He reported fever, malaise, night sweats, productive cough, and painful lower extremity ulcerations. On examination, he was febrile with left ankle swelling and erythema nodosum. Laboratory studies revealed leukocytosis and elevated inflammatory markers. There were normal calcium and angiotensin-converting enzyme (ACE) levels. An elevated 1,25-dihydroxy to 25-hydroxy vitamin D ratio suggested granulomatous inflammation. Chest imaging demonstrated massive bilateral hilar and mediastinal lymphadenopathy with scattered pulmonary nodules, raising strong concern for lymphoma. Mediastinoscopy revealed noncaseating granulomas without malignant cells, confirming sarcoidosis. The patient was treated with prednisone and naproxen, with rapid resolution of fever, arthritis, and rash.
Discussion:
This case illustrates syncope as an uncommon presenting feature of LÃ¶fgren syndrome and underscores the diagnostic complexity of sarcoidosis when clinical findings overlap with lymphoma. Although elevated ACE levels are often associated with sarcoidosis, normal ACE levels should not lower clinical suspicion. In this patient, the elevated vitamin D ratio was the most reliable biochemical marker of granulomatous disease. Extensive mediastinal involvement mimicking lymphoma necessitated tissue biopsy for diagnosis. Sarcoidosis is less commonly reported in Hispanic individuals, making this presentation particularly notable. Clinicians should maintain a high index of suspicion for sarcoidosis when the classic triad is present, despite inconclusive laboratory results or when malignancy is suspected.

C06

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Delayed Diagnosis of Neuropsychiatric Lupus in a Non-English-Speaking Patient: Implications for Systematic Collateral Assessment

Abstract:
Neuropsychiatric systemic lupus erythematosus (NPSLE) is a diagnostically complex manifestation of systemic lupus erythematosus that may initially present with significant psychiatric symptoms, contributing to delayed recognition and treatment. We describe a 36-year-old non-English-speaking female patient with a recent history of intermittent medical and psychiatric encounters over one year, during which progressive psychosis was attributed to a primary psychiatric illness. Her course was characterized by fragmented care across institutions, limited collateral history, language discordance, and diagnostic anchoring on psychiatric diagnosis despite evolving systemic findings.
Several weeks after surgical management of a large pericardial effusion, the patient presented to the emergency department with acute psychiatric decompensation marked by hallucinations and behavioral abnormalities. She was admitted for cardiac monitoring and treated for presumed primary psychosis. Subsequent multidisciplinary reassessment, delayed acquisition of outside records, and neuroimaging revealing diffuse parenchymal enhancement raised concern for NPSLE. Once lupus-directed immunosuppressive treatment was initiated, the patient demonstrated substantial improvement in psychiatric symptoms.
This vignette highlights the diagnostic challenges of autoimmune disease presenting with psychiatric manifestations and underscores the importance of systematic collateral assessment, cross-institutional communication, and interdisciplinary collaboration in reducing diagnostic delay.

C07

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Closing the Hep B Gap: Boosting Vaccination Through Resident Education

Introduction: This study was conducted in a resident-run primary care clinic at a safety-net hospital in central Brooklyn, serving a predominantly Afro-Caribbean adult population with high poverty levels and immigration rates. NYC Health Department reports indicate a progressive increase in chronic hepatitis B incidence since 2020. The 2022 ACIP guidelines recommend universal adult Hep B vaccination to address inequities and reduce missed opportunities to prevent acute infection, chronic disease, cirrhosis, and hepatocellular carcinoma.

Methods: A pilot questionnaire identified knowledge and workflow gaps among primary care residents, prompting development of a standardized, peer-taught intervention. A peer-led, 15-minute educational session was delivered to 43 residents to improve knowledge, confidence, and motivation regarding universal adult Hep B vaccination based on updated ACIP guidelines. Pre- and post-surveys evaluated outcomes.

Results: The intervention significantly improved confidence and motivation. Correct responses to the statement "Adult patients vaccinated against Hepatitis B are likely to maintain protective immunity throughout their lifetime" increased by 22.0% ($p = 0.031$). Confidence in interpreting Hepatitis B serologies rose from 63.0% to 81.5% ($p = 0.004$), and understanding of vaccination guidelines increased from 70.4% to 88.9% ($p = 0.002$). Comfort discussing Hepatitis B risk factors grew by 7.4%. Early data showed a 26.67% rise in vaccination rates within three weeks post-intervention.

Discussion: Residents demonstrated strong baseline knowledge; however, enhancing clinical confidence and practical application improved motivation. These findings highlight the value of brief educational interventions that reinforce guideline adherence. By targeting confidence and motivation, the intervention encouraged adoption of evidence-based practices and improved vaccination coverage.

C08

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A Case of Hypoglycaemic Symptoms in Non-hypoglycaemic Patient Whose Symptoms Improved on Oral Octreotide: A Case Report

Introduction: The coexistence of hyperglycaemia, subjective hypoglycaemic symptoms, and hyperinsulinemia in the absence of an identifiable endogenous insulin producing tumor is uncommon but can functionally impair patients. Clinicians undergo diagnostic and therapeutic challenges to care for these patients, and sometimes leads to diagnostic overshadowing. Clinical guidelines to manage such patients are limited requiring further exploration.
Case summary: A 27-year-old female with polycystic ovarian syndrome, Hashimoto's thyroiditis and migraine (treated with metoprolol) presented with a history of subjective hypoglycaemia-like symptoms that occurred approximately 20 to 30 episodes per day, including during physical activity and sleep. Patient increased her meal frequency and intake of glucose tablets to relieve the symptoms. Laboratory values indicated hyperinsulinemia, elevated AM cortisol, C-peptide, thyroid stimulating hormone and free testosterone, and normal hemoglobin A1C, glucose levels, estimated glomerular filtration rate, follicular stimulating hormone, prolactin, insulin-like growth factor 1, free thyroxine, and negative islet cell autoantibody. Causes of hyperinsulinism were ruled out.
Intervention and Outcome: A trial of 20 mg oral octreotide once daily along with continuous glucose monitoring provided notable improvement demonstrated by increase in inter-meal duration, decrease in episodes of sudden hypoglycaemia and reduction in subjective hypoglycaemic symptoms. Clinical relevance: This case sheds new light on oral octreotide as an effective therapeutic agent in decreasing the delta drop of unexplained blood sugar levels and symptom management in patients with hypoglycaemia-like symptoms, hyperinsulinemia, insulin resistance and fluctuation between hyperglycemia and hypoglycaemia. Furthermore, this case highlights the importance of focusing on diagnostic gap and treatment instead of misattribution of the patient's symptoms to psychological factors.

C09

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Type-2 Marine-Lenhart Syndrome Without Graves' Ophthalmopathy: A Diagnostic and Therapeutic Challenge

A 41-year-old woman with a history of long-standing hyperthyroidism, previously diagnosed as toxic multinodular goiter, presented with persistent thyroid enlargement despite ongoing methimazole therapy. She remained clinically euthyroid, although laboratory evaluation revealed fluctuating thyroid-stimulating hormone suppression and newly positive thyroid-stimulating immunoglobulin (TSI) and thyrotropin receptor antibody (TRAb) levels. Ultrasound examination identified a multinodular goiter with a dominant right-lobe TI-RADS 4 nodule measuring 3.9 Ã— 2.8 Ã— 3.4 cm. I-123 scintigraphy demonstrated elevated 4-hour (30.7%) and 24-hour (45%) uptake with a patchy, heterogeneous distribution and focal nodular hyperfunction, findings consistent with Graves' disease superimposed on nodular autonomy, thereby confirming MLS.

Due to the size of the dominant nodule and patient preference, right hemithyroidectomy with isthmusectomy was performed. Although total thyroidectomy was initially planned, the procedure was limited because of a transient intraoperative loss of recurrent laryngeal nerve signal. Histopathological analysis revealed benign cystic and nodular hyperplasia. Postoperatively, the patient remained euthyroid on low dose methimazole and experienced full recovery of vocal fold mobility. No signs of thyroid eye disease were observed during the clinical course.

C10

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Medical Students'Attitudes Towards Humanities in Medical Curriculum

Background: The medical humanities is an interdisciplinary field that uses methods and concepts from the humanities to shed light on the patient experience and the practice of medicine. Many medical schools provide elective courses and instruction in medical humanities, but enthusiasm for humanities instruction among medical students is famously uneven. The study aimed to a) measure characteristics that predispose medical students to interest or disinterest in the medical humanities and b) understand students' preferences towards elective and graded medical humanities classes in medical education.
Methods: a mixed methods survey was designed to elicit demographics, interest, personality characteristics, preferred specialty, and perspective on curricular options (timing, elective, and grading). The survey was distributed to medical students of all year groups in the Doctor of Medicine (MD) program at the SUNY Downstate College of Medicine.
Results: Forty-six fully completed questionnaires were received. A majority of students (27:19) felt that humanities subjects should be elective (rather than a mandatory part of the curriculum). Most students felt that medical humanities curricula should not be assessed or graded, regardless of respondents' levels of interest (32:14). A majority indicated that the first or last year of medical school would be most appropriate for humanities learning. Many wrote that the pressure of being graded detracts from the "creative" benefit of humanities. Others acknowledge that medical humanities are important to teach to all medical students.
Conclusions: This study explores the perspective of medical students on whether and how the humanities should be incorporated in medical education. Regardless of personal interest in humanities, this student group showed majority preference towards elective and non-graded medical humanities components in the medical curriculum.

C11

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GENE THERAPY AND THE GUT:A RARE COMPLICATION IN DUCHENNE MUSCULAR DYSTROPHY

Objective
To report the first case of lower gastrointestinal bleeding following Elevidys (delandistrogene moxeparvovec) gene therapy in a child with Duchenne muscular dystrophy.
Methods: A seven-year-old boy with genetically confirmed Duchenne muscular dystrophy (out-of-frame mutation involving exons 34-54) had been on chronic corticosteroids since April 2023 and transitioned to deflazacort with stable motor function. He received Elevidys on April 4, 2025 after normal baseline laboratory evaluation, including complete blood count, liver function tests, troponin, and anti-AAVrh74 antibody titers. The immediate post-infusion course was uneventful. Within 48 hours, he developed abdominal pain, emesis, poor intake, and loose stools. On post-infusion day four, he presented with dehydration and new-onset hematochezia requiring admission.
Results: Laboratory evaluation showed leukocytosis (26,000/ÂµL), thrombocytosis (531,000/ÂµL), elevated aspartate aminotransferase (111 U/L) and alanine aminotransferase (195 U/L) consistent with underlying muscle disease, and stable hemoglobin at baseline (16 g/dL). Gamma-glutamyl transferase and infectious stool studies were negative. Platelet counts remained normal to elevated. An initial positive blood culture was deemed a contaminant. Gastroenterology excluded infectious and structural causes. Bleeding decreased with supportive care alone, without transfusion or endoscopic intervention. He was discharged after five days and remains asymptomatic at four-month follow-up.
Conclusion: Gastrointestinal bleeding has not been reported in Elevidys clinical trials or post-marketing safety resources. In this case, the temporal association with infusion and exclusion of infectious, structural, and hematologic causes suggest a self-limited mucosal process, possibly immune mediated. Similar immune mechanisms have been implicated in Elevidys-associated myocarditis. This case expands the emerging safety profile of adeno-associated based gene therapy.

C12

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The Impact of Forensic Medical and Psychological Evaluations for Asylum Seekers in Brooklyn, NY (2006-2025): A Retrospective Descriptive Study in a Metropolitan Academic Setting

Global forced displacement has reached unprecedented levels, yet limited data describe the characteristics of asylum seekers receiving forensic evaluations in urban U.S. academic centers. In 2019, a multidisciplinary student-run asylum clinic was established at SUNY Downstate to expand access to medical and psychological forensic evaluations in Brooklyn, NY. We conducted a retrospective descriptive study of individuals who received forensic physical and/or psychological evaluations for persecution-based immigration relief through Downstate-affiliated providers from 2006 to 2025. Data were abstracted from Physicians for Human Rights Forensic Evaluation Request Forms, Applications for Asylum and for Withholding of Removal (Form I-589), clinic records, asylee affidavits, and provider affidavits, including demographics, country of origin, evaluation type, trauma exposures, and legal outcomes. Cases with incomplete data or non-asylum visa categories were excluded. Among 115 cases, clients had a mean age of 33 years, originated from 41 countries, and were interviewed in 15 languages, with Central America and West Africa most represented. Cases frequently cited multiple legal grounds, most commonly membership in a particular social group (76%), followed by political opinion (52%); 24% reported persecution based on LGBTQIA+ identity. The most frequently documented abuses included physical assault, verbal and emotional abuse, and threats of violence or death, with most clients experiencing multiple trauma types. Evaluations included psychological (n=44), physical (n=30), combined physical-psychological (n=37), and gynecologic (n=4). Among 48 cases with adjudicated outcomes, 94% were granted asylum or related protection, exceeding reported national grant rates of approximately 42%. Establishment of a multidisciplinary asylum clinic coincided with marked expansion in evaluation capacity and improved access to trauma-informed forensic services for asylum seekers.

C13

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Case Report: First-Time Seizure in an Adult Female with Septo-Optic Dysplasia and Subependymal Gray Matter Heterotopia

A first-time seizure in adulthood warrants urgent evaluation to assess recurrence risk and identify underlying structural causes. Although many adult-onset seizures are idiopathic, neuroimaging is essential to exclude congenital or acquired brain abnormalities.

We report a 41-year-old woman presenting with a first-time generalized tonic-clonic seizure who was subsequently found to have both subependymal gray matter heterotopia (SEH) and septo-optic dysplasia (SOD), an uncommon combination presenting in adulthood.

This patient was found unresponsive during sleep with foaming at the mouth and urinary incontinence, followed by postictal confusion. She had no prior seizure history. Neurologic examination revealed chronic right eye blindness with a nonreactive pupil, exotropia, and mild right lower facial droop. Laboratory evaluation was unremarkable. Brain MRI demonstrated focal unilateral subependymal gray matter heterotopia in the left occipital horn region, along with absence of the septum pellucidum and hypoplasia of the optic chiasm and optic nerves, consistent with septo-optic dysplasia. CTA of the head and neck was normal.

She was started on levetiracetam 750 mg twice daily and remained seizure-free during hospitalization. At home, she had a breakthrough seizure after missing doses of levetiracetam. She continues outpatient neurologic follow-up.

SEH is a neuronal migration disorder strongly associated with epilepsy, typically presenting in childhood or adolescence. SOD classically presents in childhood with visual and endocrine abnormalities. The coexistence of SEH and SOD likely increased this patient's seizure susceptibility and recurrence risk, justifying initiation of antiseizure therapy after a first unprovoked seizure.

This case highlights the importance of comprehensive neuroimaging in adults presenting with first-time seizures and contributes to the limited literature describing the adult presentation of septo-optic dysplasia associated with epilepsy.

C14

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Spouse and Partner Educational Attainment as a Risk Factor for Stroke: A Cross-sectional Analysis of 2024 National Health Interview Survey Data

Background/Rationale:
One's own educational attainment demonstrates an established inverse relationship with stroke risk. Spouse/partner educational attainment (SPE) serves as a proxy for household-level resources and may also independently influence stroke risk. However, its independent contribution to stroke risk remains inadequately characterized.
Methods:
A cross-sectional analysis of 2024 National Health Interview Survey data was performed including participants ≥ 40 years old living with a spouse or partner. The primary exposure variable was SPE. Outcome was self-reported stroke history. Covariates were participants' educational attainment, age, sex, race, geographic region, and cardiovascular risk factors. Descriptive statistics, bivariate analyses using Pearson's chi-squared test and Wilcoxon rank sum test, and correlation analyses were conducted using R.
Results:
Stroke prevalence was 3.8% with significant sex differences (males 4.7%, females 2.9%, $p<0.001$). Unadjusted analysis revealed significant associations between lower SPE and stroke (Grade 0-11: OR 1.86, 95% CI 1.14-2.93, $p=0.010$; High School/GED: OR 1.65, 95% CI 1.22-2.26, $p=0.001$). In fully-adjusted multivariate analysis, SPE demonstrated no independent association with stroke across educational levels (Grade 0-11: OR 0.67, 95% CI 0.37-1.21; High School/GED: OR 0.86, 95% CI 0.59-1.26; Some College: OR 0.75, 95% CI 0.49-1.16; Associate's Degree: OR 0.93, 95% CI 0.63-1.38; Bachelor's Degree: OR 0.90, 95% CI 0.64-1.29). Independent predictors were coronary heart disease (OR 2.33, 95% CI 1.80-3.00, $p<0.001$), hypertension (OR 1.78, 95% CI 1.39-2.28, $p<0.001$), diabetes (OR 1.48, 95% CI 1.16-1.89, $p=0.002$), and age (OR 1.04 per year, $p<0.001$). Sex-stratified multivariate analyses revealed consistent patterns.
Conclusions:
SPE demonstrates no independent association with stroke. Crude associations are mediated through traditional risk factors and individual educational attainment.

C15

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Biomarkers used to Diagnose Polycystic Ovarian Syndrome in Adolescents and Young Adults: A Literature Review

Background: Polycystic ovarian syndrome (PCOS) affects around 13% of women worldwide, yet up to 70% remain undiagnosed. PCOS is associated with significant long-term risks, including diabetes, cardiovascular disease, infertility, and endometrial cancer, making early diagnosis essential. Proposed mechanisms include hormonal dysregulation, epigenetic changes, and insulin resistance. While few biomarkers, such as anti-mullerian hormone (AMH) and insulin-like growth factor-1 (IGF-1), have been identified in adults, limited research focuses on adolescents. This study aims to review existing literature to identify biomarkers that can be used in diagnosis of PCOS in adolescents.
Methods: The systematic review was conducted in accordance with Preferred Reports Items for Systematic Reviews and Meta-analyses (PRIMSA) guidelines. A comprehensive literature search using predefined search terms was performed across electronic databases including Pubmed, Cochrane, Embase, and Elsevier from January 1998 to May 2025. Studies were screened independently based on the following inclusion criteria: adolescents and young adults from ages 10 to 24, diagnosis of PCOS, and serum biomarkers.
Results: Our search identified 983 potential studies, of which 428 were screened based on title and abstract, leading to 72 full-text articles assessed for eligibility. Ultimately, 36 studies met inclusion criteria. At least sixteen biomarkers were identified. The most commonly reported biomarker was AMH. Other studies reported biomarkers such as IGF-1, irisin, and omentin.
Conclusion: Various biomarkers, including serum AMH, IGF-1, adipokinectin, irisin, omentin-1, and inhibin-A may be useful in the diagnosis of PCOS in adolescents and young adults. Ultimately, earlier diagnosis will allow for earlier, personalized interventions in PCOS patients, which in turn could decrease rates of diabetes, cardiovascular disease, endometrial cancer, and other PCOS-related conditions.

C16

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Factors influencing reception and perceived accessibility of in-vitro fertilization (IVF) information in low-income and minority populations

OBJECTIVE:Access to in-vitro fertilization (IVF) in the United States remains inequitable, with women from underserved and minority communities facing social and structural barriers. This study evaluates how income, race, marital status/partner support, insurance, and prior pregnancy history influence receipt of and perceived access to IVF information.
MATERIALS AND METHODS:In this prospective, cross-sectional IRB-approved study, an anonymous survey was distributed via Amazon Mechanical Turk to 200 English-speaking women aged 18-50 in the United States (October 2024-January 2025). Chi-square tests assessed associations between race, income, partner status, and IVF information access. Significant findings were further analyzed using binary logistic regression in IBM SPSS 29.
RESULTS: Higher-income individuals (>$80,000) were 91.4% less likely to report receiving IVF information (p=0.002, Exp(B)=0.086), explaining 15.7% of variance. Income also influenced perceived accessibility (Ï‡Â²=21.532, p<.001) but accounted for only 3.3% of variance. Insurance increased likelihood of receiving IVF information 1.4-fold (p=0.034, Exp(B)=1.399) and modestly affected perceived access. Partner support was a strong predictor: those with supportive partners were 7.46 times more likely to receive IVF information (p<.001, Exp(B)=7.458) and 3.17 times more likely to perceive IVF as accessible (Ï‡Â²=30.836, p<.001). Marital status similarly predicted both outcomes (p<.001). Previously pregnant participants were 15.6 times more likely to report receiving IVF information (p<.001). Racial differences emerged: White and Asian participants more often cited concerns about IVF failure and treatment burden, while Black and Hispanic participants more frequently reported social support and insurance barriers.
CONCLUSIONS:Social and structural factors, including partner support, insurance, and prior pregnancy, play a greater role than income alone in shaping IVF information access and perceived access.

C17

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Adjunct Inositol Therapy in PCOS: Impact on Assisted Reproduction Fertility Outcomes

Introduction: Polycystic ovary syndrome (PCOS) is characterized by hyperandrogenism, ovulatory dysfunction and insulin resistance. Myo-inositol (MI) and D-chiro-inositol (DCI) are insulin-sensitizing agents that improve metabolic parameters and may reduce ovarian androgen excess, potentially enhancing fertility. While inositols are widely studied in PCOS, their role as adjuncts in assisted reproductive technologies (ART) warrants further evaluation. This literature review examines the impact of inositol supplementation on fertility outcomes in PCOS patients undergoing ART.
Methods: A literature search of PubMed, Web of Science, EMBASE and Cochrane Library was conducted through January 2026 using terms ("myo-inositol" OR "d-chiro-inositol") AND "polycystic ovarian syndrome" AND "assisted reproductive technology." Studies published before 2000, case reports/series, in vitro studies, and non-English articles were excluded. Four independent reviewers screened 99 records, with 16 duplicates removed. After screening 83 titles/abstracts, 28 full texts were reviewed, and 9 met inclusion criteria.
Results: Across 9 studies, inositol use was evaluated in ovulation induction (OI) and in vitro fertilization (IVF). In OI, MI use was associated with higher clinical pregnancy rates and, when combined with metformin, live birth rates. In IVF, MI alone or combined with DCI was associated with higher clinical pregnancy rates in 3 out of 5 studies, with live birth benefits only reported in select MI/DCI combination studies. Fertility benefits were observed with MI alone and in combination regimens, with larger effects often seen when used with other agents.
Discussion: Inositol supplementation may improve clinical pregnancy outcomes in PCOS patients undergoing ART, but evidence for live birth remains insufficient. Small sample sizes, heterogeneous protocols and variable dosing limit conclusions. Larger, well-designed trials are needed to define the role of adjunct inositols in ART.

C18

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Association of CGM application Views with Glycemic Control and Pregnancy Outcomes among Patients with Diabetes in Pregnancy

Introduction:
In recent years, use of continuous glucose monitoring (CGM) has grown in popularity among pregnant patients managing diabetes. Studies of glucose monitoring outside of pregnancy suggest that increased scanning/viewing frequency is associated with improved glycemic control. However, no study to date has evaluated the impact of self-monitoring frequency for the management of diabetes in a pregnant population. We aimed to evaluate if increased viewing of glucose values in the Libre application is associated with improved glycemic control in pregnancies complicated by diabetes.

Methods: This was a retrospective cohort study of all patients with diabetes in pregnancy managed in a diabetes in pregnancy program in 2025 and utilizing a Libre 3 Plus sensor for glycemic monitoring. CGM data, including the average views, from the last ninety days of pregnancy were utilized. The correlation of the number of patients views with time in range (TIR) (defined as 63-140mg/dL) was assessed using Spearman's rank correlation. Wilcoxon rank sum test was performed to compare the number of patient views with large for gestational age (LGA), defined as birthweight > 90th percentile, and adverse pregnancy outcomes (APO) including hypertensive disorder of pregnancy, shoulder dystocia, neonatal hypoglycemia, neonatal respiratory distress, NICU admission, fetal death, or neonatal death.

Results:
Of the 44 included patients, 6 (13.6%) had a LGA birth and 28 (63.6%) had an APO. There was a positive correlation of number of views with TIR, but did not reach significance (Ï +0.27, p=0.07). The number of views did not differ between those who had a LGA birth and those who did not (25, (IQR 12-76) vs. 12.5, (IQR 4-25) views, p=0.12) However, patients who had more views had lower rates of APO (48, (IQR 22-80) vs. 19, (IQR 5-46) views, p=0.016)

Conclusion:
Patients with more views had lower rates of APO and trended towards lower rates of LGA births and increased TIR. These findings

C19

Mary Chan B.S. Advisor(s): Nataliya Shaforost DNP, FNP, CDCES

Co-author(s):

Nurse-driven Telemedicine Educational Activity Impact on Adult Patient Missed Appointments

Missed appointments have affected adult patients with adverse health outcomes and impacted primary care clinic operations. Non-communication of presenting telemedicine options for follow-up visits by clinical staff was evidenced as a major contributor to adult patient missed appointments. The purpose of this quality improvement (QI) project was to reduce the high rates of missed appointment rates and low telemedicine visits following an educational activity presented to the local primary clinic team. The Plan-Do-Study-Act (PDSA) model guided the DNP QI project. The project was planned to identify, among adult patients, how would the implementation of a telemedicine educational activity impact missed appointment rates in a primary care clinic? The process improvement goal was to increase adult telemedicine visits by 10%. The clinical improvement goal was to reduce adult missed appointment rates within the primary care clinic. After presenting the education activity, there was a surprise finding of an increase in adult missed appointment rates. However, although the results were unsuccessful, other literature found evidence that communicating the telemedicine option within scheduling procedures improved adult missed appointment rates. A major limitation was the implementation of the project between July and August, 2025. The time frame coincided with the rotation of existing medical residents transitioning out and the onboarding of new residents, which affected the continuity of participants within the project. Consequently, the fidelity of the data from the rotation of the participants was an implication that may have affected the reliability of the results. Based on previous literature and the limitations of this project, communicating the telemedicine option to patients when scheduling follow-up visits is advised to improve adult missed appointment rates. Furthermore, distributing of the education activity materials to new residents and staff is recommended.

C20

Chris Lee DO Advisor(s): Qi Yu M.D.

Co-author(s):

NON-CIRRHOTIC PORTAL HYPERTENSION ASSOCIATED WITH MYELOPROLIFERATIVE NEOPLASM - WHAT TO DO NEXT? A CASE SERIES

Introduction: Non-cirrhotic portal hypertension (NCPH) is characterized by portal hypertension without advanced fibrosis, most commonly due to prothrombotic states. Management often follows cirrhosis-based guidelines, though optimal strategies in myeloproliferative neoplasm (MPN)-associated NCPH remain unclear.

Case Series:

Patient 1: An 82-year-old man presented with recurrent ascites requiring serial paracenteses. Imaging showed portal vein thrombosis (PVT), severe IVC narrowing, and no cirrhosis. High SAAG ascites supported NCPH. JAK2 V617F mutation confirmed MPN-related hypercoagulability. He improved with anticoagulation and diuretics. EGD revealed large esophageal varices requiring banding; carvedilol was not tolerated due to hypotension.

Patient 2: A 58-year-old woman presented with coffee-ground emesis, melena, and syncope. Imaging demonstrated PVT without active bleeding. Liver biopsy showed obliterative portal venopathy and nodular regenerative hyperplasia consistent with NCPH. MPL p.W515K mutation supported MPN. Nadolol was initiated. EGD showed one small varix and portal hypertensive gastropathy. Portal pressures (HVPG 2 mmHg) indicated adequate control.

Discussion: MPN-related NCPH presents management challenges with limited evidence-based guidance. Early EGD for variceal screening may be warranted, particularly when nonselective beta blockers are not tolerated. EUS-guided portal pressure measurement during index EGD may have diagnostic and prognostic value. Prospective studies are needed to guide management.

C21

Charlotte Walden B.S. Advisor(s): Shahzaib Khan MBBS

Co-author(s): Charlotte Walden, BS, Dr. Shahzaib Khan, MBBS, Dr. Annie Levine, MD, Dr. Thomas Wallach MD

Lowered Pre-Test Probability of Crohn's Disease Diagnosis in Colonoscopy in the Post-Pandemic Environment Despite Similar Population Incidence

Introduction:Â Prior work by our group has identified a novel, likely prevalent clinical syndrome linked with persistent SARs-CoV2 infection, which can mimic Crohn's Disease.Â Anecdotally, clinicians have observed a per-procedure drop in pre-test probability of a CD diagnosis, but limited data exists assessing any possible shift which may have occurred in this window.Â We set out to assess what shift, if any, has occurred in pre-test probability of Crohn's disease diagnosis with colonoscopy.Â Â
Methods: Using TriNetX, two cohorts were built, one with a history of colonoscopy with biopsies performed from 2015-2019, who did not at the time of the biopsy have a diagnosis of Crohn's Disease, Indeterminate Colitis, or Ulcerative Colitis, and a cohort of patients with the same criteria, but time window shifted from 2021-2025.Â Â Propensity score matching on race, age at index event (colonoscopy), gender, race, and ethnicity was performed, generating two cohorts of 980,932 patients, and the outcome of a new Crohn's disease dx applied within 3 months of colonoscopy was tested using Kaplan-Meier Analysis.Â
Results: Using PSM matched samples, from 2015-19, patients undergoing colonoscopy had 3976 cases/980932 total patients, and from 2021-25 had 1949 cases/980,932 total patients, with a hazard ratio of 1.78 (CI 1.666-1.898) with reference to hazard of obtaining a CD ICD10.Â Population level rates of CD were assessed in the same time intervals in the TriNetX dataset, with the time windows returning 166,511 and 160,816 living patients with an active CD diagnosis.Â Â Â
Discussion:Â Per our data, per colonoscopy rates of diagnosis declined in the TriNetX dataset after 2020, without noticeable differences in cohort size in the network (consistent with literature suggesting CD new incidence has trended towards stabilization).Â Further analysis is pending to assess per-colonoscopy rates using an interrupted time series approach.Â Â

C22

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Clinical Characteristics and Treatment Outcomes in a Pediatric Inflammatory Bowel Disease Cohort

Objective Pediatric inflammatory bowel disease (IBD) is increasing in incidence worldwide; however, published cohorts lack racial diversity. We aimed to provide an in-depth, multidimensional characterization of data within a predominantly Black population underrepresented in the literature.
Methods We conducted a retrospective chart review of 38 pediatric patients with IBD at a single urban center. Data were collected at enrollment near diagnostic endoscopy and at two follow-up timepoints. Variables included laboratory markers, imaging, endoscopic abnormalities and corresponding histopathology, and treatment-related data including drug trough and antibody levels. The presented findings reflect selected variables from a broader dataset with additional clinical and therapeutic data available for further analysis.
Results Among 38 patients, 78.9% identified as Black. Crohn disease accounted for 68.4% of cases, with the inflammatory (B1) phenotype predominating (84.6%). Among the 31.6% with ulcerative colitis, 80.0% presented with pancolitis. At enrollment, 86.5% of patients reported abdominal pain, 77.8% reported weight loss, 56.8% reported bloody stools, and 51.3% reported functional limitation. At follow-up, these rates decreased to 25.0%, 8.3%, 22.2%, and 25.0%, respectively. Median ESR, CRP, and fecal calprotectin were elevated at enrollment (52.5 mm/hr, 12.5 mg/dL, and 1,690 Î¼g/g, respectively) and declined at follow-up (23 mm/hr, 5 mg/dL, and 497 Î¼g/g). Patients initiated anti-tumor necrosis factor therapy within a mean of 2.6 months from diagnosis; 66.7% were receiving corticosteroids at time of anti-TNF induction. Therapy modification occurred in 23.5%, most commonly due to primary or secondary drug failure.
Conclusion In this predominantly Black pediatric cohort, patients presented with high inflammatory burden and extensive disease. Future work will incorporate digital histology and a data science-driven multi-omics framework to predict therapeutic response.

C23

David Inzerillo M.S. Advisor(s): Thomas Wallach M.D.

Co-author(s): Susanna Auyeung (Co presenter)

Preventing Gastrostomy Tube Placement Through Early Intensive Feeding Therapy in the Neonatal Intensive Care Unit: Two Case Studies

Background
Feeding difficulties are common in preterm and medically complex infants in the Neonatal Intensive Care Unit (NICU) and frequently lead to prolonged nasogastric tube feeding or surgical gastrostomy tube placement. These interventions are associated with increased risk of infection, oral aversion, prolonged hospitalization, and higher healthcare costs. Early, individualized feeding therapy delivered by trained therapists can promote safe oral feeding skills and prevent the need for invasive feeding tubes. This case series describes two NICU infants who achieved full oral feeds and avoided gastrostomy tube placement following targeted feeding therapy.
Patient 1 was a premature infant with anemia of prematurity, laryngomalacia secondary to prematurity, Prader Willi Syndrome. Generalized Hypotonia improving. Feeding adaptation. Maternal SLE. Anemia. Bilat undescended testes, Scrotal US (3/17) bilateral cryptorchidism (testicles cephalic to scrotal sac).
Patient 2 was an infant with extreme Prematurity, VLBW, Severe Chronic lung disease. Pulmonary Hypertension, s/p iNO. Anemia of prematurity. Vitiligo. Both infants received frequent, individualized feeding therapy incorporating evidence-based techniques including cue-based feeding, paced bottle feeding, oral sensorimotor stimulation, positioning modifications, and caregiver education in responsive feeding. Therapy focused on building oral-motor strength, endurance, coordination, and state regulation while supporting neurodevelopmental care principles. Multidisciplinary collaboration with NICU physicians, nurses, and nutritionists ensured safe progression.
Outcomes: Patient 1 progressed from NPO to 100% oral feeds with stable vital signs, consistent weight gain, and successful removal of the nasogastric tube prior to discharge. Patient 2 advanced from NPO to oral feeds by discharge.

C24

David Inzerillo M.S. Advisor(s): Thomas Wallach M.D.

Co-author(s): Shahzaib Khan, Simon Rabinowitz

INPATIENT FEEDING PROGRAM FOR A VULNERABLE, UNDERSERVED, PEDIATRIC POPULATION: A PILOT STUDY

INPATIENT FEEDING PROGRAM FOR A VULNERABLE, UNDERSERVED, PEDIATRIC POPULATION: A PILOT STUDY
Background: Pediatric feeding disorders (PFD) encompass a variety of conditions that interfere with a child's ability to consume a developmentally appropriate diet essential for growth. These disorders, often found in children with simultaneous behavioral and medical problems, lead to nutritional deficiencies, social/behavioral delays and poor physical growth. Unfortunately, services such as intensive, multidisciplinary feeding programs have traditionally been limited for underserved populations. Our study describes a pilot multidisciplinary program highlighted by a comprehensive inpatient stay in an inner-city university medical center.

C25

Dylan Muro-Wong M.A.T. Advisor(s): Harris Huberman M.D.

Co-author(s): Katerina Christensen (co-first author), Dylan Muro-Wong (co-first author), Nicole Aubort, Frances Feng, Vanessa Froehlich, Francesca Garces, Aurelia Humble, Victoria Emasealu, Lillian Moshkovich, Daniel Mishan, Harris Huberman

Establishing Inter-Rater Reliability in Medical Student Training on the Brief Observation of Social Communication Change

The Brief Observation of Social Communication Change (BOSCC) is a novel instrument designed to detect subtle changes in social communication among children with Autism Spectrum Disorder (ASD). Given this sensitivity, rigorous inter-rater reliability is essential for accurate implementation. We describe the training and calibration of a cohort of medical students and the methods used to establish reliability. Across 12 training sessions, single-rater reliability (ICC[2,1]) did not demonstrate a significant linear increase over time ($R\hat{A}^2 = .02$, $p = .68$), and average-rater reliability (ICC[2,k]) showed a modest, non-significant upward trend ($R\hat{A}^2 = .13$, $p = .22$). However, absolute deviation of total scores across raters decreased over time ($R\hat{A}^2 = .23$, $p = .10$), reflecting progressive convergence in scoring. Per BOSCC standards, a rater was considered reliable after achieving three consecutive videos within 3 points of a consensus score and no more than three individual categories exceeding a 1-point discrepancy. 80% of raters met this criterion by the final three trainings. To assist in creating reliability, we created a series of consensus rules for items not specified directly by the BOSCC directions, helping raters create common guidelines with which to assess children. These findings demonstrate effective calibration over time, with decreasing scoring dispersion and attainment of formal BOSCC reliability benchmarks.

C26

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Co-author(s): Katerina Christensen, Nicole Aubort, Frances Feng, Vanessa Froehlich, Francesca Garces, Aurelia Humble, Victoria Emasealu, Lillian Moshkovich, Daniel Mishan

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C27

Sabah Islam B.A. Advisor(s): Stephan Kohlhoff M.D.

Co-author(s): Dr. Tamar Smith-Norowitz, PhD, Department of Pediatrics
Dr. Rauno Joks, M.D, Department of Medicine

Prevalence of asthma and atopy in perinatally human immunodeficiency virus-exposed but uninfected children in Brooklyn, New York

Background. Increased prevalence of atopy has been reported in human immunodeficiency virus (HIV)-infected adults. Previous studies in our laboratory demonstrated that there was no increased prevalence of atopy in perinatally HIV-infected children compared with the general population. However, this has not been studied in perinatally HIV-exposed but uninfected children.
Objective. The aim of this study investigates the prevalence of asthma and atopy (i.e. allergic rhinitis (AR), atopic dermatitis, urticaria, general allergies) in perinatally HIV-exposed uninfected children compared with HIV-unexposed uninfected children.
Methods. Retrospective chart review identified patients (F/M, 0 to 21 y/o) seen at an academic center between the years 2005-2025. Patients were either perinatally HIV-exposed but uninfected (N=62) or control group (N=60) (HIV-unexposed, uninfected) in Brooklyn, NY. The primary analysis assessed relationships between prevalence of asthma/atopy and HIV exposure. Data analysis was conducted using SAS v9.4.3.
Results. Prevalence of atopic conditions was higher in perinatally HIV-exposed, uninfected versus HIV-unexposed uninfected children ($P = <0.0001$). The prevalence of asthma was higher in HIV-unexposed, uninfected children compared with controls ($P = 0.0432$). Of the children who had asthma, prevalence of atopic conditions was higher in HIV-exposed, uninfected children ($P = 0.0034$) (Chi-squared test).
Conclusion. The increased prevalence of allergy and atopy in perinatally HIV-exposed, uninfected children may be linked to dysregulated inflammatory processes associated with factors related to intrauterine/perinatal HIV exposure.

C28

Christina Pan B.A. Advisor(s): Isuree Katugampala M.D.,M.P.H.

Co-author(s):

Needs Assessment: Identifying Gaps in the Continuum of Care for Autistic Children in a Primary Pediatric Clinic Development of MAST - Multidisciplinary Autism Support and Transition

Autism spectrum disorder (ASD) is a spectrum of neurodevelopmental disorders that involve social interaction impairment, communication challenges, and behavioral stereotypies. There has been an increase in autism prevalence throughout the last decades as shown in CDC data released in 2020, largely due to improved screening rates. Given the now better understood prevalence of ASD in the US general population, there is also better understanding of the substantial care needs required of patients with ASD, including direct and indirect costs to families. The objective of this study is to assess the current guidance on best practices for autistic children within a primary pediatric clinic setting, with the goal of identifying gaps in care coordination and support services in order to inform targeted improvements in clinical practice and care delivery. We searched the Pubmed and AAP databases for studies published between 2015 and 2025 evaluating resource coordination, health disparities for autism patients, and information on methodologies and outcomes of autism care programs implemented in the U.S. and internationally. We also used de-identified preliminary data extracted from a Social Determinants of Health dashboard in order to identify metrics related to patients with ASD between June 2024-June 2025, SDOH screening and positivity rates, and relevant demographic information. We found checkpoints for care included diagnosis, intervention, and the adulthood transition, through the progression of the patient's life. We identified steps to be taken by providers and caregivers in line with the current standard of diagnosis and care, as well as key stakeholders who would be involved in establishing an autism care coordination. Our literature review and preliminary data collection show critical points that can be strengthened to guide families through an ASD diagnosis, highlighting the importance of a streamlined model to guide providers and families alike.

C29

Eslam Awadalla M.D. Advisor(s): Vatcharapan Umpaichitra M.D.

Co-author(s): Dr. Vivian Chin, Dr. Renee Bargman

Differences between children and adolescents with metabolically healthy vs unhealthy obesity: transitions and predictors over 9 years

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Obesity is an independent risk factor for cardiovascular disease and continues to rise worldwide. A subgroup with obesity, termed metabolically healthy obese (MHO), lacks metabolic comorbidities. Predictors of this phenotype and its stability remain unclear. Limited studies, especially in children, have examined transitions between MHO and metabolically unhealthy obese (MUO).
We conducted a retrospective chart review of pediatric patients with BMI ≥95th%ile seen in our Pediatric Endocrinology Clinics at baseline and/or ≥9 yr later. MUO was defined as ≥1 abnormal criterion: fasting glucose ≥100 mg/dL, HbA1c >5.6%, BP ≥90th %ile for age/sex/Ht, TG ≥150 mg/dL, HDL <40 mg/dL. MHO: not meeting above criteria.
Of 604 charts reviewed, 87 were observed for ≥9 yr; 53% female and 47% male, with >90% African American/Caribbean descent. Within baseline MHO (n=26), 12 (46.2%) remained MHO and 14 (53.8%) crossed to MUO. Age, Ht, Wt, and SBP differed between MHOâ†'MUO vs MHOâ†'MHO. Ht remained independently significant (p=0.027); for each 1 cm increase, odds of metabolic abnormalities increased by 7%. Additionally, 93% who changed from MHOâ†'MUO did so within 1-6 yr (2.92Â±1.66). Within baseline MUO, 52 (85.2%) remained MUO and 9 (14.8%) improved to MHO. No strong baseline predictors of improvement were identified. Transition frequency differed significantly (p=0.0004), with deterioration more common than improvement. Gender was not associated with phenotype change.
More than half of youth with MHO demonstrated metabolic deterioration over time, while only one in seven with MUO improved. Height was the strongest independent predictor, unaffected by age adjustment. Transition occurred as early as 3 yr after baseline, consistent with metabolic decline during puberty. The MHO phenotype in some youth is transient. Regular evaluation during growth and timely lifestyle interventions are necessary, as reliable predictors of stable MHO remain undefined.

C30

Paris Acquaro Advisor(s): Thomas Wallach M.D.

Co-author(s):

Racial Disparities in Gastrointestinal Diagnoses Among Children With Chronic Abdominal Pain

Background:
Chronic abdominal pain is a common pediatric complaint, with irritable bowel syndrome (IBS) frequently diagnosed. Because IBS lacks clear biomarkers, diagnosis requires exclusion of organic conditions such as inflammatory bowel disease (IBD), celiac disease, and Helicobacter pylori infection. Adult studies suggest racial disparities in gastrointestinal diagnoses, with White patients more often diagnosed with IBS and celiac disease, and Black patients more often diagnosed with H. pylori. Large-scale pediatric data are limited. Understanding whether race influences functional versus organic diagnoses in children with chronic abdominal pain is critical, as disparities may reflect differences in healthcare access, diagnostic practices, and implicit bias, ultimately affecting outcomes.
Objective:
To compare the incidence of IBS and other gastrointestinal outcomes between White and African American children presenting with chronic abdominal pain.
Methods:
We performed a retrospective cohort study using the TriNetX Global Collaborative Network (152 healthcare organizations). White (n=981,275) and African American (n=247,475) children aged 5-18 years with abdominal pain were identified. Outcomes included IBS, ulcerative colitis, Crohn's disease, celiac disease, H. pylori, and diagnostic procedures (colonoscopy, MRI enterography, tTG antibody testing). Propensity score matching yielded two balanced cohorts of 246,960 patients each. Kaplan-Meier analyses excluded patients with prior outcomes.
Results:
After matching, White children had higher risks of IBS (2,368 vs 839; HR 2.94, 95% CI 2.72-3.18, $p<0.001$), ulcerative colitis (HR 1.39, 95% CI 1.20-1.60), Crohn's disease (HR 1.40, 95% CI 1.26-1.56), celiac disease (HR 7.86, 95% CI 6.73-9.18), colonoscopy (HR 2.13, 95% CI 2.02-2.24), and tTG testing (HR 2.51, 95% CI 2.39-2.63). African American children were more frequently diagnosed with H. pylori (HR 0.63, 95% CI 0.54-0.72, favoring Black cohort).

C31

Nguyen Hai Nam Pham Advisor(s):

Co-author(s):

Prevalence of Dyslipidemia Among Pediatric Patients Undergoing Lipid Screening at an Urban Academic Medical Center: A Retrospective Cross-sectional Study

Dyslipidemia in childhood is a well-established risk factor for atherosclerotic cardiovascular disease (ASCVD) and is associated with the early development and progression of subclinical atherosclerosis into adulthood. Although prior studies have described pediatric dyslipidemia and the emerging pattern of atherogenic dyslipidemia, the real-world prevalence and distribution of specific lipid abnormalities in urban clinical settings remain incompletely characterized. We conducted a retrospective cross-sectional study, using electronic health record data from SUNY Downstate Medical Center (TriNetX). Patients aged 2-18 years with at least 1 documented lipid value from January 1, 2015, to December 31, 2025, were included to evaluate the prevalence of lipid disorders. The primary outcome was the presence of any abnormal lipid and each dyslipidemia component. Dyslipidemia was defined as NHLBI Guidelines. Subgroups by age, race, ethnicity, and comorbidities were analyzed using unadjusted PRs with 95% CIs. Of 6,100 eligible patients (50.8% female; mean age 12.2â€¯Â±â€¯3.7â€¯years; 90.2% non-Hispanic Black), 43.1% had dyslipidemia. Elevated triglycerides (24.3%) and low HDL-C (23.5%) were most common. Dyslipidemia prevalence was higher among patients with diabetes (PRâ€¯1.65â€¯[95%â€¯CIâ€¯1.51-1.80];â€¯pâ€¯<â€¯.001). Mean triglycerides in children agedâ€¯2-8â€¯years were 103â€¯mg/dL, above the NHLBI borderline threshold. Non-Hispanic (NH) Black patients had lower rates of elevated total cholesterol (9.5%â€¯vsâ€¯18.8%;â€¯PRâ€¯0.51â€¯[95%â€¯CIâ€¯0.36-0.71]) and elevated LDL-C (8.6%â€¯vsâ€¯18.8%;â€¯PRâ€¯0.46â€¯[95%â€¯CIâ€¯0.33-0.64]) than NH White patients (bothâ€¯pâ€¯<â€¯.001).
Dyslipidemia affects nearly half of children receiving clinical lipid screening in this predominantly NH Black urban cohort. The significant burden of dyslipidemia observed in NH Black compared with NH White patients underscores the need for routine lipid screening and early intervention.

C32

Nguyen Hai Nam Pham M.D. Advisor(s):

Co-author(s):

Prevalence of LDL-C Elevation Meeting Heterozygous Familial Hypercholesterolemia Screening Thresholds in Children Aged 2-18 Years: A Retrospective Cross-Sectional Study

Elevated low-density lipoprotein cholesterol (LDL-C) drives lifelong atherosclerotic cardiovascular disease (ASCVD) risk. In children, significant LDL-C elevation often reflects heterozygous familial hypercholesterolemia (HeFH), which remains underrecognized, particularly in diverse urban populations. We performed a retrospective cross-sectional study using electronic health record data from SUNY Downstate Medical Center (TriNetX). Patients aged 2-18 years with ≥1 LDL-C value between January 1, 2015, and December 31, 2025, were included. We estimated the prevalence of LDL-C values meeting HeFH screening thresholds (≥160 and ≥190 mg/dL). Two cohorts were analyzed: an unrestricted primary dataset (D1) and a restricted dataset (D2) excluding secondary causes of hyperlipidemia. Subgroups (sex, race/ethnicity, diabetes status, and weight status) were compared using chi-square or Fisher's exact tests. Of 6,020 patients (D1; 50.8% female; mean age 12.2 Â± 3.7 years; 90.4% NH Black), 2.49% (1 in 40) had ≥1 LDL-C ≥160 mg/dL and 1.00% (1 in 100) had ≥1 LDL-C ≥190 mg/dL. Among 2,430 patients with ≥2 measurements, rates were 2.06% (1 in 49) and 0.82% (1 in 122), respectively. In the restricted cohort (D2; N=5,930), prevalence was 2.02% and 0.51% at the respective thresholds. At ≥1 LDL-C ≥190 mg/dL and with ≥2 measurements, our rates exceeded a prior community-based cohort (1.00% vs. 0.60%; 2.06% vs. 1.00%; 0.82% vs. 0.30%), with reference values falling below our 95% CI lower bounds in each case. At ≥160 mg/dL, prevalence was higher in children with diabetes (8.0% vs. 2.3%; $p<0.001$) and in NH White vs. NH Black children (6.2% vs. 2.4%; $p=0.005$). In this predominantly non-Hispanic Black urban pediatric cohort, approximately 1 in 40 children met LDL-C criteria for HeFH screening. High-suspicion and persistent elevations exceeded community benchmarks, suggesting a significant burden of undiagnosed HeFH and supporting universal pediatric lipid screening in urban centers.

C33

Hitangee Jain B.A. Advisor(s):

Co-author(s):

Feeding the Graft, Growing the Child: Nutritional Challenges and Strategies in Pediatric Solid Organ Transplantation

Background: Improved survival after pediatric solid organ transplantation has shifted focus toward long-term growth and metabolic outcomes. Nutritional status is a key determinant of recovery, yet challenges differ by organ type and transplant phase.
Objective: To review nutritional complications in pediatric solid organ transplant recipients and summarize evidence-based management strategies.
Methods: A structured review identified 10 relevant sources, including observational studies, narrative reviews, a case series, and one clinical practice guideline. Pediatric patients undergoing intestinal, liver, heart, and kidney transplantation were included.
Results: Growth failure was common, particularly in intestinal and liver transplant recipients, with limited catch-up growth despite graft success. In contrast, pediatric heart transplant recipients demonstrated rising rates of overweight and obesity post-transplant, increasing the risk of metabolic syndrome. Organ-specific micronutrient deficiencies were frequent and pre-transplant protein-energy malnutrition and sarcopenia were associated with greater morbidity. Management emphasized biochemical monitoring, early enteral nutrition when feasible, structured parenteral nutrition weaning, and targeted micronutrient supplementation. High-calorie, high-protein regimens were recommended for children with end-stage liver disease, and steroid minimization was associated with improved growth outcomes. Multidisciplinary care was consistently recommended.
Conclusions: Pediatric solid organ transplant recipients face distinct nutritional challenges requiring individualized, longitudinal management. Although early nutritional intervention and close monitoring are supported, most recommendations derive from observational data, underscoring the need for prospective studies to establish standardized, organ-specific protocols.