
INFECTIOUS DISEASES
SOCIETY OF PUERTO RICO
celebrating 40 years
SEIPR 2025
HONORING THE PAST,
INSPIRING THE FUTURE
May 3 & 4, 2025
Caribe Hilton Hotel
San Juan PR
Special Guest &
Visiting Speaker
Tina Tan, MD
FIDSA, FPIDS, FAAP
IDSA President
IDSA
Affiliate

PREAMBLE

The Infectious Diseases Society of Puerto Rico (SEIPR) was founded in 1985 and its members celebrated the 40th anniversary of the Society during the 2025 Annual Convention, held on May 3rd & 4th, 2025. Members of the SEIPR include subspecialists in adult or pediatric infectious disease (also known as infectologists), as well as fellows in training.

The mission of the SEIPR is aligned to the goals of the Infectious Disease Society of America (IDSA), to which it is affiliated: "to improve the health of individuals, communities, and society by promoting excellence in patient care, education, research, public health, and prevention relating to infectious diseases". In fact, Dr. Tina Tan, Professor of Pediatrics at the Fienberg School of Medicine at Northwestern University and current IDSA President, attended the SEIPR's 2025 Annual Convention as Visiting Speaker.

During the past several years, the world has witnessed that the field of infectious diseases is vital, current, vibrant, and constantly evolving. Infectious disease doctors work every day with scientists and other healthcare professionals in order to respond to emerging, reemerging, endemic, and sporadic infections. Additionally, infectologists develop strategies to decrease the growing resistance to antibiomicrobial agents and contribute to the creation of infection control policies. There are also infectious disease specialists working actively in healthcare administration, academia, research, and pharmaceutical industry.

With great enthusiasm for the SEIPR's 40th anniversary, we are pleased to submit to the *Puerto Rico Health Sciences Journal* (PRHSJ) the abstracts that were selected for oral and poster presentation during the SEIPR's 2025 Annual Convention. In general, these abstracts (prepared by students, residents, and fellows) show typical manifestations of rare infectious diseases, atypical presentations of more common conditions, hyperinflammation in response to infections, or adverse events secondary to antimicrobials in pediatric and adult patients evaluated, diagnosed, and treated in different areas of Puerto Rico. Specifically, 14 submissions were selected for poster presentation, while 4 others were selected for oral presentation. During the scientific meeting, a panel of judges awarded the poster presenters with the top scores. These clinical cases reflect the reality, complexity, and variety of the practice of infectious disease specialists in Puerto Rico nowadays.

We thank the PRHSJ, especially Dr. Valerie Wojna (Editor-in-Chief), Ms. Vivette Resto (Editorial Assistant), and Ms. Mariroan Sellés Ramírez (Scientific Illustrator) for the opportunity to include these cases in this supplement for the benefit of the scientific community and expect to collaborate with you in future endeavors.

Sincerely,

Board of Directors
SEIPR

2024 – 2026 SEIPR BOARD OF DIRECTORS

Marielys Otero, MD, FIDSA
President

Héctor J. Meléndez, MD, FIDSA
Vice-President

Juan C. Lemos-Ramírez, MD
Secretary

Sanet Torres-Torres, MD, FAAP
Treasurer

Doris Pérez-Torres, MD
Vocal

Glenda M. González, MD
Vocal

Arelis Febles-Negrón, MD, FACP
Vocal

Humberto M. Guiot, MD, FACP, FIDSA
Immediate Past President

ABSTRACTS SELECTION COMMITTEE

Voting Members:

1. Arelis Febles-Negrón, MD, FACP

2. Doris Pérez-Torres, MD

3. Humberto M. Guiot, MD, FACP, FIDSA

Coordinator:

Mrs. Enid Rivera-Soto

JUDGING PANEL

1. Arelis Febles-Negrón, MD, FACP

2. David Cotto, MD

3. Doris Pérez-Torres, MD

4. Gloria Jové, MD, FACP

5. Héctor J. Meléndez, MD, FIDSA

6. Humberto M. Guiot, MD, FACP, FIDSA

7. Jorge Santana, MD, FIDSA

8. Lemuel Martínez, MD, FIDSA

9. Michelle González, MD, FIDSA

POSTER PRESENTATIONS

PP1 - An Unusual Case of Meningococcal Meningitis in an Elderly Woman: A Case Report

Massiel Almonte Caminero, MD[1]; Luis M. Rivera Ortiz[2]; Marisol Santiago Arce, MD[3]; Félix Betancourt Bojos, MD[3]; Martha L. Villarreal Morales, PhD[4]; Janiabeth Vega Maldonado, MD[5]

[1]Family Medicine Residency Program, Manatí Medical Center, Manatí, PR 00674
[2]Medical Education Department, Manatí Medical Center, Manatí, PR 00674
[3]Department of Family Medicine, Manatí Medical Center, Manatí, PR 00674
[4]Department of Clinical Research, Manatí Medical Center, Manatí, PR 00674
[5]Department of Infectious Disease. Manatí Medical Center, Manatí, PR 00674

INTRODUCTION: Meningococcal disease (MD) caused by *Neisseria meningitidis* is increasingly affecting older adults, who often present without the classic triad of fever, neck stiffness, and altered mental status. While MD remains common in children and adolescents, it now accounts for up to 25% of cases among the elderly in developed countries. In older adults, symptoms such as confusion, lethargy, weakness, or gastrointestinal upset may dominate, leading to delayed diagnosis.

CASE PRESENTATION: We present the case of a 73-year-old woman with a history of migraines and lumbago with sciatica who presented with intractable headache, progressive confusion, weakness, and diarrhea. The caregiver denied fever or sick contacts, but reported recent travel to crowded places. Her vaccination status was unknown. Neurological examination revealed cognitive impairment and motor dysfunction without nuchal rigidity. Brain MRI suggested meningitis and ventriculitis, prompting further workup, including lumbar puncture. Empiric therapy with intravenous meropenem, vancomycin, and acyclovir was initiated due to concern for infectious etiology. CSF analysis showed elevated white blood cells, low glucose, and high protein levels, consistent with bacterial meningitis. Though CSF cultures were negative, PCR confirmed *Neisseria meningitidis*. The patient improved significantly with antibiotic therapy and was discharged for rehabilitation.

DISCUSSION: This case highlights the importance of considering meningitis in elderly patients with unexplained neurological or systemic symptoms. Early empiric treatment, guided by clinical suspicion, is critical for improving survival and preventing complications. Given the shifting epidemiology of meningococcal disease, age-specific vaccination strategies and clinical guidelines are essential for protecting this vulnerable population.

PP2 - Ruptured Expectations: Unmasking a Cerebral Mycotic Aneurysm in Pediatric Endocarditis

Cristina Tavera Montañez, MD[1]; Luis R. Berríos Pagán, MD[1]; Zoé M. Rodríguez Rivera, MD[2]; Sanet Torres Torres, MD[2]; Inés O. Esquilín Rivera, MD[2]

[1]Pediatric Residency Program, University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067
[2]Pediatric Infectious Disease Section, University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067

INTRODUCTION: Pediatric infective endocarditis (IE) is an uncommon but serious condition, with an estimated incidence of 0.43–0.69 cases per 100,000 children annually. Among its rarest and most catastrophic complications is the development of mycotic aneurysms, particularly in children with complex comorbidities.

CASE PRESENTATION: A13-year-old male with epidermolysis bullosa and failure to thrive was initially admitted due to fever, abdominal pain, and severe anemia. Blood and skin lesions cultures identified methicillin sensitive *Staphylococcus aureus* (MSSA), leading to the initiation of targeted antimicrobial therapy with nafcillin. Echocardiogram revealed a left atrial mass. Subsequently, the patient developed persistent headaches, vomiting, and progressive neurological deterioration. Neuroimaging identified a subarachnoid hemorrhage and a multilobulated aneurysm in the right middle cerebral artery (MCA). Emergency neurosurgical intervention confirmed a bilobed, inflamed mycotic aneurysm. He required a right fronto-temporal hinged craniotomy and clipping of MCA complex mycotic aneurysm. Successively, a ventriculoperitoneal shunt was placed due to communicating hydrocephalus. Despite intensive care with a multidisciplinary team and prolonged antibiotic therapy, the patient suffered multiple ischemic strokes which resulted in a left hemiparesis.

CONCLUSION: This case underscores the diagnostic and therapeutic challenges of managing mycotic aneurysms in pediatric IE. It highlights the critical importance of maintaining high clinical suspicion, initiating early neuroimaging for new neurological symptoms, and engaging a multidisciplinary team for timely intervention. Early detection and aggressive management are essential to improve outcomes in this otherwise devastating complication.

PP3 - A Life-Threatening Immune Overreaction: Dengue-Driven Hemophagocytic Lymphohistiocytosis (HLH)

Nicholle A. Carrión Tió, MD, MPH;
Melissa Rodríguez Rodríguez, MD

Puerto Rico Women and Children Hospital, Bayamón, PR

INTRODUCTION: Dengue infection can cause excessive immune activation, leading to abnormal cytokines release (cytokine storm). Hemophagocytic lymphohistiocytosis (HLH) is a life-threatening hyperinflammatory syndrome caused by the overactivation of the immune system. HLH is rare, with an incidence of 1.2 cases per million people per year. Secondary HLH, triggered by infections, most commonly by dengue virus, account for approximately 40% of cases.

CASE PRESENTATION: A 19-year-old male with hypothyroidism came to the emergency department due to fever of three days of evolution, body ache, nausea, diarrhea, weakness, and generalized malaise. The patient was admitted with a confirmed dengue type III fever. After seven days, the patient continued with high fevers, but started to present altered mental status with visual hallucinations, as well as worsening thrombocytopenia, leukopenia, transaminitis, hyperferritinemia, elevated procalcitonin, and increased LDH. Due to warning signs, he was transferred to PICU. Bone marrow aspiration reported hemocytic phagocytosis, for which a diagnosis of HLH was made. He was started on a course of pulse steroids. Despite multiple complications (bilateral pneumonia in need for BiPAP and IV antibiotics, nephrotic range proteinuria, elevated blood pressure in need of antihypertensive medication, hypertriglyceremia, and mild action tremor and dysarthria), after completion of steroid therapy, the patient showed clinical improvement with downtrending laboratory markers and improvement in neurological state.

DISCUSSION: Symptoms of secondary HLH can overlap with those of severe dengue, making diagnosis difficulty. Early diagnosis and treatment are critical in improving survival. In cases of successful treatment, most patients recover, although prolonged hospital stays and follow-up are often required.

PP4 – Persistent Back Pain in a Healthy Adolescent as a Manifestation of Chronic Hematogenous Vertebral Osteomyelitis

Leened M. Velázquez García, MD[1]; Jessilu Alvarez Marrero, BS[2];
Sanet Torres Torres, MD[3]

[1]Pediatrics Residency Program, Centro Médico Episcopal San Lucas, Ponce, PR
[2]University of Puerto Rico, Río Piedras Campus, San Juan, PR
[3]Pediatric Infectious Diseases, The San Jorge Hospital, San Juan, PR

INTRODUCTION: While it can occur in any bone, vertebral osteomyelitis -infection of the vertebral bodies- is relatively rare in the pediatric population. The clinical presentation in children can be subtle, with symptoms such as back pain, fever, and vague constitutional symptoms, making early diagnosis challenging. The most common pathogen is *Staphylococcus aureus*, though other organisms, such as tuberculosis or gonorrhea, can also be implicated. Chronic vertebral osteomyelitis, as seen in this case, may present with a prolonged course of symptoms, making it difficult to diagnose until significant findings, such as vertebral deformity or neurological compromise, occur.

CASE PRESENTATION: We present the case of an athletic, otherwise healthy 12-year-old male who developed chronic osteomyelitis affecting the T7-T10 vertebrae. The patient's initial presentation (about 5 months earlier to this evaluation) included fever, chills, severe back pain, and localized tenderness. At that time, other diagnoses such as muscle pain and trauma were considered. Given persistence and gradual worsening of pain, he had spine MRI done that was suggestive for osteomyelitis. He underwent bone biopsy and bone histopathology confirmed the diagnosis of chronic osteomyelitis, though pre-treated bone cultures were all negative. Empiric antibiotic therapy with intravenous clindamycin was initiated, resulting in a gradual improvement in inflammatory markers and clinical condition.

DISCUSSION: The case emphasizes the importance of early recognition and treatment of osteomyelitis in children, even in the absence of a clear microbial etiology. Prolonged antibiotic therapy and close follow-up are essential for optimal recovery and to prevent complications such as vertebral collapse or neurological damage.

PP5 – Cytomegalovirus Reactivation Induced by Chemotherapy: A Clinical Case of Duodenitis and Esophagitis in an Immunocompromised Host

Diana De Frias, MD[1], Martha Villarreal Morales[2], Marielys Otero Maldonado, MD[3]

[1]Family Medicine Residency Program, Manatí Medical Center, Manatí, PR 00674
[2]Graduate Medical Education Department, Manatí Medical Center, Manatí, PR 00674
[3]Infectious Disease Section, Internal Medicine Department, Manatí Medical Center, Manatí, PR 00674

INTRODUCTION: Immune checkpoint inhibitors (ICI), such as pembrolizumab, have revolutionized cancer treatment by enhancing immune responses to tumors. However, these therapies can also lead to immune dysregulation, increasing the risk of opportunistic infections, including viral reactivation. Cytomegalovirus (CMV), a latent herpesvirus, can cause severe complications in immunocompromised individuals, especially those undergoing ICI therapy. By enhancing T-cell activity, pembrolizumab may trigger CMV reactivation, which can mimic immune-related adverse events such as colitis or pneumonitis, complicating the diagnostic process.

CASE PRESENTATION: This case describes 76-year-old Hispanic woman with a past medical history of cardiac arrhythmia, hypertension, left breast cancer ongoing pembrolizumab treatment, and encephalitis. The patient presented a three-week history of shortness of breath, chest pain, and dysphagia. Through hospital admission, the patient's gastrointestinal symptoms worsened, which prompted Gastroenterology service consultation and an endoscopic procedure. Biopsy revealed CMV duodenitis and esophagitis. Ganciclovir therapy was initiated, resulting in significant clinical improvement. The patient was discharged with instructions to continue valganciclovir therapy for one week.

DISCUSSION: This case underscores the importance of close monitoring for CMV reactivation in patients receiving pembrolizumab, especially those with prior immunosuppressive treatment. Early detection, prompt antiviral treatment, and regular surveillance can significantly improve patient outcomes. As immunotherapy continues to evolve, better strategies for managing these complications may help mitigate risks and optimize cancer treatment efficacy.

PP6 - Genital Aphthous Ulcers in a Pediatric Patient with Dengue Fever: A Case Report (1ST PRIZE WINNER)

Melissa M. Owen Jiménez, MD;
Patricia Rodríguez Reyes, MD

Pediatrics Residency Program, Puerto Rico Women and Children's Hospital, Bayamón, PR

INTRODUCTION: Genital ulcers in pediatric patients are most commonly due to sexually transmitted diseases, but certain arboviruses have been associated with this clinical manifestation. Here we present a case of female with new onset genital aphtous ulcers in the setting of dengue fever.

CASE PRESENTATION: An 11-year-old female without history of systemic illnesses presented to Puerto Rico Women and Children's Hospital with complaints of one day history of new onset genital lesions, described as tender shallow based ulcers. Three days prior to admission, she developed high fevers, generalized maculopapular rash, anorexia, and watery diarrhea. She had no previous sexual encounters or oral ulcers. Laboratories on admission were significant for leukopenia, thrombocytopenia, and transamitis. The patient underwent extensive laboratory evaluation, including HIV, syphillis, chlamydia, gonorrhea, HSV (IgM, IgG, genital swab, and blood PCR), pancultures, and autoimmune work-up, but the results were negative. Viral titers for dengue, CMV, and EBV were obtained, of which dengue IgM titers were negative, but the PCR was positive for DENV3. Ulcers resolved without recurrence and the rest of hospital course followed without any other complications.

DISCUSSION: There are limited cases of genital ulcers in children associated with dengue fever, but well documented cases secondary to other arboviruses such as chinkungunya. It is important for physicians serving endemic areas for dengue to be aware of the cutaneous manifestations associated with this virus.

PP7 - From Flu to Myelitis: A Rare Complication of Influenza Infection

Elisnel Bermúdez Valentín MD[1]; Isabel García Sanchez MD[2]; Kimberly Pagan Marchese MD[2]; Ethyann Garcia Mateo, MD[2]; Milton D. Carrero Quiñones, MD[2]

[1]Department of Graduate Medical Education, Rotatory Internship Program, Mayagüez Medical Center, Mayagüez, PR
[2]Department of Internal Medicine, Mayagüez Medical Center, Mayagüez, PR

INTRODUCTION: Influenza affects around a billion people annually. Upper respiratory symptoms, myalgias and pyrexia are the leading complaints reported. Nevertheless, neurologic symptoms are rarely documented. Transverse myelitis is an uncommon complication after influenza infection in an immunocompetent individual. It is a rare neurological disorder defined by acute focal inflammation in the spinal cord.

CASE PRESENTION: This case involves a 31-year-old male with no past medical history who presented to the Emergency Room with progressive lower extremity weakness, causing inability to walk and associated urinary incontinence for 9 days of evolution. Recent travel history or vaccine administration was denied. He reported being diagnosed with influenza two weeks before arrival for which oseltamivir was completed at home. Five days after onset, neurologic symptoms started. Brain MRI was unremarkable. However, cervical, thoracic and lumbar spine MRI revealed multiple hyperintense lesions on T2 FLAIR sequences suggestive of acute transverse myelitis. Extensive workup was ordered to evaluate for possible etiologies, including infectious and rheumatologic causes, all of which resulted unremarkable. Lumbar puncture was performed, but the cerebrospinal fluid analysis and culture were negative. High dose steroids, intravenous immunoglobulins, and physical therapy were cornerstone in the patient's rapid clinical improvement and we were able to transfer him to an inpatient rehabilitation center.

DISCUSSION: This case highlights the importance of recognizing the possible neurologic symptoms that influenza infection can cause in a healthy young male and demonstrates the significance of obtaining a detailed history, extensive work-up, and multidisciplinary evaluation to make the diagnosis of possible complications after an influenza infection.

PP8 – Multisystem Inflammatory Syndrome in Children (MIS-C) and Macrophage Activation Syndrome (MAS): Too Much of a Bad Thing (HONORABLE MENTION)

Leened M. Velázquez García, MD[1]; Jessilu Álvarez Merrero, BS[2]; Sanet Torres Torres, MD[3]

[1]Pediatrics Residency Program, Centro Médico Episcopal San Lucas, Ponce, PR
[2]University of Puerto Rico, Río Piedras Campus, San Juan, PR
[3]Pediatric Infectious Diseases, The San Jorge Hospital, San Juan, PR

INTRODUCTION: Multisystemic inflammatory syndrome in children (MIS-C) is a rare, but serious condition that occurs following recent SARS-CoV-2 infection. Although MIS-C shares clinical features with Kawasaki disease (KD), including prolonged fever and mucocutaneous changes, it also presents with gastrointestinal symptoms, which are often absent in KD. The overlap in clinical features between these two, along with the possibility of concurrent infections, composes a significant diagnostic challenge. Macrophage activation syndrome (MAS), a severe complication of systemic inflammatory diseases, can further complicate the clinical course. MAS is characterized by excessive activation of macrophages and T-cells, leading to widespread inflammation, organ dysfunction, and hematologic abnormalities such as pancytopenia and elevated ferritin. MAS can be triggered by infections, autoimmune diseases, and conditions like MIS-C.

CASE PRESENTATION: A 20 months-old female presented with persistent fever, rash, and respiratory symptoms. Despite initial treatments for a suspected respiratory disease, including Mycoplasma pneumoniae, the child's fever persisted, and inflammatory markers continues in upward trend. The clinical course raised concerns for atypical KD and MIS-C, complicated by the development of MAS. A positive SARS-CoV-2 nucleocapsid antibody supported diagnosis of MIS-C. The patient was treated with high-dose intravenous immunoglobulin, aspirin, and steroids, with close monitoring for cardiovascular and hematologic complications. Bone marrow aspiration revealed signs of MAS and the patient's exaggerated inflammatory response improved with use of anakinra, an interleukin antagonist.

DISCUSSION: This case highlights the diagnostic complexity of differentiating between MIS-C, atypical KD, and MAS, emphasizing the importance of a multidisciplinary approach to management and the need for ongoing surveillance in these severe post-viral inflammatory syndromes.

PP9 – Multisystemic Inflammatory Syndrome in Children (MIS-C) in a Toddler with Concurrent Respiratory Syncytial Virus (RSV) Infection: A Case Report

Leened M. Velázquez García, MD[1]; Jessilu Alvarez Marrero, BS[2]; Sanet Torres Torres, MD[3]

[1]Pediatrics Residency Program, Centro Médico Episcopal San Lucas, Ponce, PR
[2]University of Puerto Rico, Río Piedras Campus, San Juan, PR
[3]Pediatric Infectious Diseases, The San Jorge Hospital, San Juan, PR

INTRODUCTION: Multisystem inflammatory syndrome in children (MIS-C) is a rare, but serious condition that occurs following recent SARS-CoV-2 infection, presenting with persistent fever, gastrointestinal symptoms, mucocutaneous involvement, and cardiovascular findings. The management of MIS-C includes immunomodulatory therapies to prevent complications such as coronary artery aneurysms and myocarditis.

CASE PRESENTATION: A healthy, immunized 1-year-old male presented with acute-onset high-spiking fever, abdominal pain, and watery diarrhea. He was admitted and started on empiric antibiotics given concerns for an intraabdominal process. At that time, he developed cough and copious rhinorrhea. His laboratory evaluation was remarkable for leukocytosis and elevated inflammatory markers. He continued persistently febrile, and he also developed a generalized, erythematous maculopapular rash. On his 7th day of fever, additional evaluation was done including SARS-CoV-2 serum antibodies and a transthoracic echocardiogram. Upon further questioning, parents disclosed a history of upper respiratory infection in all household contacts about 4 weeks prior to the patient's hospital presentation. He was started on therapy for presumed MIS-C with high-dose aspirin, systemic steroids plus a single dose of IV immunoglobulins after his echocardiogram was reported positive for a left coronary artery aneurysm. The diagnosis was confirmed by a positive SARS-CoV-2 nucleocapsid antibody testing. His PCR panel from nasopharyngeal secretions was positive for RSV.

DISCUSSION: This case highlights the importance of considering MIS-C in the febrile children. The patient's presentation of prolonged fever, rash, diarrhea, and elevated inflammatory markers, in conjunction with positive SARS-CoV-2 antibodies, strongly support the diagnosis of MIS-C despite intercurrent acute RSV infection. Early recognition and appropriate treatment are crucial in preventing cardiovascular complications and improving patient outcomes.

PP10 – Primary CNS Lymphoma Unmasked: Rare Co-Diagnosis with Toxoplasmosis in an Immunocompromised Host

Gabriela Rodríguez-Bengochea, MD[1], Alejandro Carmona-Casillas, MD[1], Iván J. Ortiz-Colón, MD[2, 3], Carlos Cedeño-Encarnación, MD[2], María V. García-Pallas, MD[2, 3]

[1]Internal Medicine Residency Program, Department of Internal Medicine, University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067
[2]Hematology and Oncology Section, Department of Internal Medicine, University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067
[3]Division of Cancer Medicine, University of Puerto Rico Comprehensive Cancer Center Hospital, PO Box 363027, San Juan, PR 00936-3027

INTRODUCTION: Primary Central Nervous System Lymphoma (PCNSL) is a rare malignancy that can mimic other intracranial pathologies in immunocompromised patients, particularly toxoplasmosis. This case underscores the diagnostic challenge posed by overlapping clinical and radiologic findings.

CASE PRESENTATION: A 50-year-old female with hypertension and systemic lupus erythematosus (SLE) on immunosuppressive therapy (hydroxychloroquine and mycophenolate mofetil) presented with headache and left-sided hemiparesis. She had regular exposure to cat feces due to gardening and cat ownership. Imaging revealed vasogenic edema in the left frontoparietal and right parasagittal regions with multiple ring-enhancing lesions, suggestive of toxoplasmosis. Serologic testing confirmed elevated toxoplasma IgG and IgM titers. Initial treatment with trimethoprim/sulfamethoxazole was discontinued due to adverse effects and replaced with atovaquone, clindamycin, and azithromycin. Clinical and radiologic improvement was observed. However, MRI spectroscopy showed persistent lesions. Biopsy was initially deferred due to the presumed infectious etiology. A subsequent MRI demonstrated worsening edema and lesion size, prompting neurosurgical biopsy. Histopathology revealed Primary Large B-cell Lymphoma. The patient was referred to Oncology service and initiated on chemotherapy.

DISCUSSION: This case illustrates a diagnostic challenge in an immunocompromised patient with concurrent toxoplasmosis and PCNSL. Overlapping clinical and radiologic features delayed lymphoma diagnosis, highlighting the need for continued investigation when brain infections do not fully resolve. Given the patient's exposure, immune status, and imaging, toxoplasmosis was initially presumed. However, PCNSL was confirmed after disease progression. Clinicians should maintain high suspicion for alternative diagnoses when lesions persist despite therapy. Early biopsy consideration may enable timely diagnosis and treatment of potentially life-threatening conditions.

PP11 – Pulmonary Nocardiosis in an Immunocompromised Patient on Atovaquone Prophylaxis: A Case Report

Claudia S. Pérez-Draper, MD[1]; Emilette Marrero-Torres, MD[1], Anyelina Jiménez-Frías, MD[2]; Coralys Soto, MD[2]; Juan Lemos-Ramírez, MD[2]

[1]Internal Medicine Department, VA Caribbean Healthcare System, San Juan, PR
[2]Infectious Diseases Department, VA Caribbean Healthcare System, San Juan, PR

INTRODUCTION: Pulmonary nocardiosis is a rare opportunistic infection in immunocompromised patients. Trimethoprim-sulfamethoxazole (TMP-SMX) is the preferred prophylactic agent; but in some cases, TMP-SMX is not suitable or is contraindicated. In such cases, alternative regimens are used. We present a case of pulmonary nocardiosis in a liver transplant recipient who was receiving atovaquone prophylaxis instead of TMP-SMX due to chronic kidney disease (CKD) resulting from organ rejection, as well as poor compliance with immunosuppressive therapy.

CASE PRESENTATION: A 68-year-old male with a history of liver transplantation and CKD was admitted due to progressive respiratory symptoms. The patient had been on atovaquone for *Pneumocystis jirovecii* pneumonia (PJP) prophylaxis. Chest imaging revealed multifocal lung opacities concerning infectious etiology. Bronchoalveolar lavage fluid was obtained and sent for microbiological analysis. Testing confirmed *Nocardia species*, consistent with pulmonary nocardiosis. The patient was initiated on imipenem, amikacin, and linezolid. Brain MRI was negative, ruling out central nervous system involvement. Clinical and radiographic improvement was noted after prolonged antimicrobial therapy. This case underscores the potential risk of nocardiosis in transplant recipients not receiving TMP-SMX prophylaxis.

DISCUSSION: Atovaquone, while effective for PJP prophylaxis, may not provide adequate protection against *Nocardia* infections. Transplant recipients with CKD, who cannot receive TMP-SMX, may be at increased risk for nocardiosis. Clinicians should maintain a high index of suspicion for *Nocardia* infections in this population and consider early diagnostic testing in patients with unexplained pulmonary symptoms. Alternative prophylactic strategies may be needed in patients who cannot tolerate TMP-SMX.

PP12 – Roses Are Not Always At Fault (2ND PRIZE WINNER)

Frances N. Connor-Recio, MD[1]; Coralys Soto-Rodríguez MD, MPH[2]; Julio Torres-Rivera, MD[1]; Yarely Gierbolini-Martínez, MD[1]; Manuel del Río-Montesinos MD; Melanie Guzmán-García, MPH[3]; Juan Carlos Lemos-Ramírez, MD[2]; Gloria Soto-Pillich MD[2]

[1]Internal Medicine Department, VA Caribbean Health Care System San Juan, San Juan, PR
[2]Infectious Disesase Department, VA Caribbean Healthcare System, San Juan, PR
[3]Ponce Health Sciences University, Ponce, PR

INTRODUCTION: Sporotrichosis is a subacute to chronic infection caused by the dimorphic fungal genus *Sporothrix*, most commonly *Sporothrix schenckii*. It typically follows trauma involving plants or soil and presents in a lymphocutaneous form, mimicking bacterial or mycobacterial infections. Immunocompromised individuals are at greater risk for severe disease. This case highlights the diagnostic and therapeutic challenges in such a patient with a non-healing traumatic wound.

CASE PRESENTATION: A 68-year-old male with primary hyperparathyroidism, osteoporosis, type 2 diabetes, chronic kidney disease, and multiple myeloma post-autologous stem cell transplant (2023) on daratumumab, presented with a worsening right forearm lesion following a cactus thorn injury nine days earlier. He initially received oral cephalexin for five days without improvement. The wound progressed to show purulent drainage, friable lesions, erythema, and ascending nodular lymphangitis. He was admitted for further evaluation due to lack of antibiotic response. Differential diagnoses included sporotrichosis, nocardiosis, and atypical mycobacterial infection. Workup including biopsy, cultures, and imaging confirmed an infected wound with cellulitis. Infectious disease and dermatology were consulted. He was started on itraconazole 200mg daily, the first-line treatment for sporotrichosis, along with ceftaroline 600mg IV q12h for broad-spectrum coverage. Given clinical improvement, the patient was discharged on doxycycline hyclate 100mg every 12 hours and amoxicillin-clavulanate 875/125mg every 12 hours for 7 days, continuing itraconazole for at least one month, with outpatient follow-up in 2-3 weeks.

DISCUSSION: This case underscores the importance of considering fungal infections in non-healing wounds, particularly in immunocompromised individuals. Prompt recognition and targeted therapy are crucial for optimal outcomes as fungal infections continue to emerge.

PP13 - Concurrent DIRA and DITRA in a Preterm Infant Presenting with Multifocal Osteomyelitis and Pustular Dermatitis (3RD PRIZE WINNER)

Brayan A. Pagán Rodríguez[1]; Shadaira N. Morales Rivera[1]; César A. Rosado Bloise[1]; Gerardo Caussade Silvestrini[1]; Jennifer M. Espinosa Rosa, MD[2]; Moisés García Rosa, MD[2]; Sanet Torres Torres,MD[2]; Inés O. Esquilín Rivera,MD[2]; Débora H. Silva Diaz, MD[2]

[1]University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365057, San Juan, PR 00936-5067
[2]Department of Pediatrics, University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067

INTRODUCTION: Deficiency of the interleukin-1 receptor antagonist (DIRA) is a rare disease caused by mutations in the IL1RN gene, leading to uncontrolled interleukin-1 (IL-1) signaling and systemic inflammation. Similarly, deficiency of the interleukin-36 receptor antagonist (DITRA), resulting from mutations in IL36RN, manifests with severe pustular dermatitis. Early recognition and targeted therapy are critical for improving patient outcomes.

CASE PRESENTATION: We present the case of a 1-month-old preterm Puerto Rican twin male who developed right ankle swelling, hypoactivity, poor feeding, and widespread pustular skin lesions. Laboratory tests showed anemia, leukocytosis, thrombocytosis, and elevated inflammatory markers, with sterile blood cultures. Radiographs revealed multifocal lytic bone lesions consistent with osteomyelitis. Despite empirical broad-spectrum antibiotics, the patient's clinical condition deteriorated, complicated by femoral and iliac vein thrombosis. Persistent systemic inflammation prompted suspicion of an underlying autoinflammatory disorder. Genetic testing confirmed homozygous deletions in IL1RN and IL36RN, diagnosing concurrent DIRA and DITRA. Initiation of anakinra, a recombinant IL-1 receptor antagonist, led to rapid clinical improvement, including resolution of skin lesions, reduced inflammatory markers, and improved feeding. However, anemia, leukocytosis, and thrombocytosis persisted despite one week of treatment, likely reflecting residual bone marrow hyperactivity from chronic inflammation.

DISCUSSION: This case highlights the importance of considering autoinflammatory syndromes in neonates presenting with sterile multifocal osteomyelitis, pustular dermatitis, and refractory inflammation. Prompt multidisciplinary evaluation, genetic testing, and early targeted IL-1 blockade favor improved outcomes and underline the necessity of clinical vigilance for rare autoinflammatory conditions.

PP14 – Missing the Target: Acute Generalized Exanthematous Pustulosis Following Cefepime Administration

Charlynne De Jesús-Ramos, MD[1]; Mariana Rolán, MD[2]; Nayrim Zayas, MD3; Carla Cruz, MD[1]; Sylvette Nazario, MD[4]; Glenda M. González, MD[1]

[1]VA Caribbean Health Care System, San Juan, PR
[2]Infectious Diseases Fellowship Program, University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067
[3]Internal Medicine Residency Program, San Juan City Hospital, San Juan, PR
[4]Allergy and Immunology Section, University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067

INTRODUCTION: Acute generalized exanthematous pustulosis (AGEP) is a cutaneous T-cell-mediated, delayed hypersensitivity reaction characterized by non-follicular, sterile pustules on an erythematous base, which is part of the exanthematous drug eruptions along with Stevens-Johnson Syndrome (SJS), toxic epidermal necrolysis (TEN), and drug rash with eosinophilia and systemic syndromes (DRESS). Symptoms most often occur in the setting of medication exposure, such as systemic antibiotics, rapidly spread, followed by desquamation and resolution within about two weeks of discontinuing the offending agent.

CASE PRESENTATION: A 72-year-old man with cerebrovascular accident and neurologic sequelae, chronic indwelling foley was evaluated at the ED due to urinary retention and hypoactivity requiring indwelling catheter exchange. On evaluation, the heart rate was 118 bpm and the WBC count was 28.94 x 10^3/uL. He was admitted with sepsis due to catheter-associated urinary tract infection. Cefepime 2 g every 8 hours was started empirically pending bacterial susceptibilities. Both urine and blood cultures showed Proteus mirabilis and Pseudomonas aeruginosa. After clinical improvement, on day 8 of hospitalization, his WBC count increased from 11.34 x 10^3/uL to 20.98 x 10^3/uL. Physical examination revealed multiple, widespread pustules and subsequent desquamation of skin on day 10 of admission. These findings were consistent with cefepime-induced AGEP. Cefepime was withdrawn and topical triamcinolone acetonide 0.1% was given for 5 days with complete resolution of skin lesions.

DISCUSSION: Timing of AGEP occurs in a period of 1-4 days after inciting antimicrobial agent. AGEP is a T-cell mediated neutrophilic inflammatory process. AGEP should not be generalized as a potential allergic reaction involving other cephalosporins or B-lactam agents. Only the offending agent must be avoided.

ORAL PRESENTATIONS

OP1 – Severe Tetanus in the Elderly: A Case of Opisthotonus and Risus Sardonicus After Penetrating Injury

Marie G. Díaz, MD; Jorge Bertrán-Pasarell, MD; Gabriel Galíndez,MD

Infectious Diseases Fellowship Program, Adults' University Hospital / University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067

INTRODUCTION: The clinical features of tetanus, were recognized and understood by ancient civilizations, before the widespread use of tetanus vaccination in the 1940s. In 2025, the presentation of "opisthotonus" and "risus sardonicus" remains uncommon in modern practice, though these symptoms can still emerge in resource-rich countries.

CASE PRESENTATION: A 90-year-old unvaccinated male was doing well until 13 days after a penetrating injury to his left forearm by a soil-contaminated object, when he presented with an infected wound in the left arm. Despite receiving an initial tetanus vaccination, wound cleansing, and suturing, the patient was transferred to our institution for further evaluation due to shortness of breath and wound infection. On the physical examination, he was alert and oriented, reported a sensation of rigidity, and developed a progressive facial and corporal rigidity. Tetanus infection was suspected. Prompt treatment was initiated, including airway protection, IV metronidazole and intramuscular tetanus immune globulin. The patient was also placed in a low-light, quiet environment, and his wound was cleaned and debrided. After a prolonged hospitalization, the patient required tracheostomy and gastrostomy. He was discharged home, the tracheostomy was eventually removed, and he regained most daily functioning, except for residual left arm spasticity.

DISCUSSION: This case illustrates the importance of a vaccine preventable disease such as tetanus. Recognition of this syndrome is critical in the management and treatment reducing its morbidity and mortality.

OP2 – From Tropical Getaway to Inflammatory Storm: A Case Report on an Adolescent with Multisystem Inflammatory Syndrome

Mariana Rolán Otero, MD[1]; Sanet Torres Torres, MD[2]

[1]Infectious Diseases Fellowship Program, Adults' University Hospital / University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067
[2]Pediatric Infectious Diseases, University Pediatric Hospital, San Juan, Puerto Rico

INTRODUCTION: During the 2020 SARS-CoV-2 pandemic, numerous cases of children presented with a severe inflammatory syndrome following COVID-19 exposure. Multisystem Inflammatory Syndrome in Children (MIS-C), shares similarities with Kawasaki disease but features more commonly gastrointestinal symptoms, along with cardiac, mucocutaneous, and hematological involvement.

CASE PRESENTATION: This is the case of a previously healthy 16-year-old male who developed a sore throat while vacationing in Puerto Rico. Within 24 hours, he experienced fever, abdominal pain, nausea, vomiting, and watery diarrhea, as well as sudden shortness of breath and chest pain prompting medical evaluation. His father had experienced respiratory symptoms during the previous week, but no other known sick contacts were reported. Laboratory findings showed hyperbilirubinemia, transaminitis, and elevated inflammatory markers associated with hepatosplenomegaly on an abdominopelvic CT scan, leading to hospital admission. The patient presented persistent fever, jaundice, abdominal pain, and crackles requiring oxygen support. A chest X-ray identified bilateral small-to-moderate pleural effusions. Additional work-up was done to rule out differential diagnosis and antibiotic therapy was started along supportive management. Echocardiogram was remarkable for mild uniform coronary artery dilation, and small posterior and apical pericardial effusions. The patient met diagnostic criteria for MIS-C and received corticosteroids, intravenous immunoglobulin, and aspirin in the pediatric intensive care unit. His fever subsided within 48 hours, alongside marked improvement in respiratory and gastrointestinal symptoms.

DISCUSSION: MIS-C can significantly increase morbidity and mortality in pediatric patients if unrecognized or untreated. This case highlights the importance of awareness among healthcare providers for timely identification and management. Vaccination is key to prevent complications from COVID-19.

OP3 – Docking with Seizures: A South African Crew Member's Unexpected Diagnosis in Puerto Rico

Rubén González Toledo, MD[1]; Camille González Morales, MD[1]; Mariana Rolán Otero, MD[1]; Rosayra Ocasio Tapia, MD[2]; Emily Figueroa Pagán, MD[2]; Sherli Martínez Rodríguez, MD[2]

[1]Section of Infectious Diseases, Adults' University Hospital / University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067
[2]Internal Medicine Residency Program, Adults' University Hospital / University of Puerto Rico School of Medicine, Medical Sciences Campus, PO Box 365067, San Juan, PR 00936-5067

INTRODUCTION: Neurocysticercosis (NCC), caused by the larval stage of *Taenia solium*, is a major cause of adult-onset epilepsy in endemic areas. Global travel has increased its occurrence in non-endemic regions, often leading to diagnostic delays. Prompt recognition and management are key to preventing complications.

CASE PRESENTATION: A 35-year-old South African cruise ship worker presented in Puerto Rico with blurry vision and involuntary left arm movements. His past medical history and laboratory findings were unremarkable. Brain MRI showed a right parietal cystic lesion with calcifications and surrounding edema, suggestive of NCC. He was started on dexamethasone for edema and levetiracetam for seizures, resulting in rapid improvement. CSF analysis was normal, with negative cultures and non-reactive HIV testing. The diagnosis of NCC was made based on imaging, clinical presentation, and epidemiologic background. Further infectious workup, including *Strongyloides* serology and tuberculosis screening, was negative. The patient was treated with a 10-day course of albendazole alongside continued steroid and antiseizure therapy. He returned to South Africa in stable condition, and follow-up two weeks post-therapy revealed no recurrent symptoms.

DISCUSSION: This case underscores the need to consider NCC in patients from endemic regions presenting with new-onset neurologic symptoms. Early diagnosis and a multidisciplinary treatment approach, including antiparasitic, anti-inflammatory, and antiseizure therapy, are essential for optimal outcomes.

OP4 – The Unforeseen Culprit

Coralys Soto-Rodríguez MD, MPH; Kattya Cruz-López, MD; Juan Lemos-Ramírez MD; Gloria Soto-Pillich, MD

VA Caribbean Health Care System San Juan, San Juan, PR

INTRODUCTION: Mucormycosis is a rare but aggressive fungal infection that primarily affects immunocompromised individuals. This infection is classically associated with uncontrolled diabetes and steroid use. Recently, COVID-19 has been linked as an independent risk factor for development of mucormycosis. Early diagnosis is critical for improving patient outcomes. This case highlights the importance of considering mucormycosis in patients presenting with sinusitis symptoms, particularly those with a recent history of COVID-19.

CASE PRESENTATION: A 63-year-old man with hypertension, obstructive sleep apnea, diabetes mellitus, and benign prostatic hyperplasia came to the emergency room with severe right-sided retro-orbital pain, blurry vision, and nasal congestion. He had recently recovered from COVID-19, which was managed with nirmatrelvir/ritonavir as outpatient. Blood work-up showed WBC at 18x10-3/µL and CT imaging was remarkable for complicated acute sinusitis involving the right maxillary and ethmoid sinuses. He was initiated on ampicillin/sulbactam 3gm IV every 6 hours. Despite antibiotics for 48 hours, the patient failed to improve, prompting ENT consultation. Sinus biopsy confirmed the presence of fungal structures consistent with *Rhizopus spp*. Following the diagnosis, amphotericin B liposomal 425 mg (5mg/kg) IV daily was initiated and he underwent several surgical debridement procedures.

DISCUSSION: In COVID-19, elevated IL-6 and hepcidin disrupt iron homeostasis causing ferritin degradation and release of free iron, facilitating Mucorales growth. This case aims the direct association between mucormycosis in patients with recent COVID-19 infection. As a reminder, initiation of appropriate antifungal therapy and surgical intervention are crucial to improve the outcomes and preventing potentially devastating complications.