**M261**

**EARLY DIAGNOSIS OF EOSINOPHILIC FASCITIS IN A 16 YEAR-OLD FEMALE**

V. Szafron*, J. Palmieri, L. Stubbs, J. Weatherhead, M. Deguzman, S. Anvari, Houston, TX

**Introduction:** Eosinophilic fasciitis (EF) is an uncommon scleroderma-like disorder resulting from infiltration of eosinophils and other white blood cells into the fascia. The etiology of EF is frequently idiopathic, but triggers have included trauma, medications, infection, and autoimmune conditions.

**Case Description:** We present a case of EF in a 16-year old female with a history of Hashimoto's thyroiditis, food allergies, and allergic rhinitis. Two weeks following her 1st dose of the Pfizer mRNA SARS-CoV-2 vaccine, she presented with generalized edema, weight gain (for 2-3 months prior), and polyarthritus. She did not have any scleroderma-like skin changes. Laboratory analysis was remarkable for eosinophilia (2130 cells/μL), elevated aldolase (15.6 U/L), and normal creatinine kinase. Lupus testing was unremarkable. MRI of bilateral thighs showed fasciitis and muscle/fascial biopsy demonstrated inflammatory myositis consistent with EF. Given pending parasite studies, she received ivermectin prior to IV pending parasite studies. Our case demonstrates an interesting perspective on treatment.

**Discussion:** Our case demonstrates an interesting perspective on the rare diagnosis of eosinophilic fasciitis. The etiology of her EF is unclear with confounding factors including her history of Hashimoto's thyroiditis, positive Toxocara serology (IgG positive, IgM testing not available), and temporal relationship to Pfizer SARS-CoV-2 vaccine. This vaccine could have triggered an inflammatory process in the patient's already hyper-reactive immune system. It is important to promptly recognize EF, as prolonged symptoms prior to diagnosis is associated with a poor treatment response.

**M262**

**ANTI-INTERLEUKIN 5 THERAPY FOR REFRACTORY EOSINOPHILIC GRANULOMATOSIS WITH POLYANGITIS AND HYPEREOSINOPHILIC SYNDROME OVERLAP**

A. McKernan*, L. Wild, M. Le, New Orleans, LA

**Introduction:** Eosinophilic granulomatosis with polyangiitis (EGPA) is an ANCA-associated, multisystem disorder characterized by chronic rhinosinusitis, asthma, and peripheral eosinophilia that affects small-medium sized blood vessels. EGPA and Hypereosinophilic syndrome carry similar clinical and laboratory manifestations making them difficult to distinguish.

**Case Description:** We present the case of a 52-year-old female with past medical history of poorly controlled asthma, placentabruption associated with anticardiolipin antibodies and 2 miscarriages, and multiple drug allergies who presented in 2007 following recurrent ankle cellulitis with peripheral eosinophilia (AEC 1000). She developed hyperemesis gravidarum and was found to have pyloric stenosis with eosinophilic gastritis unresponsive to esomeprazole and Carafate. She responded well to high-dose oral corticosteroids, but on tapering, she developed superficial phlebitis and rising peripheral eosinophil count to 18,000 cells/μL, warranting an increase of corticosteroids. Her bone marrow studies at that time did not show myeloproliferative changes. Her course was additionally complicated by recurrent episcleritis, optic neuritis, as well as myopathy secondary to steroid usage. She subsequently failed trials of methotrexate, azathioprine, 6-Mercaptopurine, and Hydroxyurea. She was enrolled in an IRB-approved study of IV Mepolizumab 700mg every 4 weeks which markedly improved her symptoms and suppressed her peripheral eosinophilia. She failed a short trial of subcutaneous Mepolizumab 300mg every 4 weeks during which time she developed transaminis requiring hospitalization.

**Conclusion:** Patient meets criteria for HES and EGPA based on clinical history with laboratory findings. Anti-IL5 therapy has been shown to be efficacious for both conditions and warrants further investigation for refractory cases.

**M263**

**ATYPICAL PRESENTATION OF ARTHRITIS IN HYPEREOSINOPHILIC SYNDROME**

D. Kafashzadeh*, V. Aranez, H. Hara, Long Beach, CA

**Introduction:** Hypereosinophilic syndrome (HES) represents a rare and clinically challenging condition. HES is defined as an absolute eosinophil count (AEC) >1.5 x 10^9/L and eosinophil mediated organ damage when other potential etiologies have been excluded. Here we present an interesting case of HES in a patient with an atypical presentation of arthralgia.

**Case Description:** A 16-year-old African American female with history of atopy was admitted with 6 weeks of diffuse arthralgia and outpatient workup notable for anemia, elevated inflammatory markers and +ANA. Initial labs showed WBC of 19.1 k/uL with an AEC of 6,700, CK of 396, LDH of 355, with normal C4, uric acid, immunoglobulin, troponin and tryptase. On examination, the patient had swelling and tenderness of her meta-carpophalangeal and proximal interphalangeal joints. Infectious disease workup was negative and Rheumatologic workup was negative for SLE, eosinophilic granulomatosis with polyangiitis (EGPA) and connective tissue disease. Echocardiogram was negative, CT scan of her sinus were negative for sinusitis. CT chest with mild pleural and pericardial effusion without vasculitis. Bone marrow biopsy ruled out malignancy. Patient was started on systemic steroids at 1 mg/kg due to worsening AEC of 28,000. After 1 week of therapy, her AEC decreased, and her arthralgia improved.

**Discussion:** Our patient presented with an atypical presentation of arthralgia with findings of severe eosinophilia. A diagnosis of exclusion towards HES was made based on our extensive workup above. However, EGPA cannot be fully ruled out. Our case serves to bring awareness to a rare condition and highlights the importance of a multi-disciplinary approach.

**M264**

**HYPEREOSINOPHILIA, EOSINOPHILIC ENDOCARDIAL INFILTRATES, HEART FAILURE, AND LIVER MASS IN A TODDLER WITH HEART TRANSPLANT**

H. Haq*, B. Ariue, Loma Linda, CA

**Introduction:** Hypereosinophilia in pediatric patients with heart transplant have been infrequently described (1). Most cases are related to allograft rejection (2), with other etiologies rarely reported.

**Case Description:** A 20-month-old male with a history of truncus arteriosus and interrupted aortic arch with heart transplant 10 months earlier was admitted after routine heart biopsy showed cellular and antibody mediated rejection. There were moderate numbers of eosinophils in the endocardial and interstitial infiltrates. His exam was significant for no fever, rash, lymphadenopathy, hepatosplenomegaly, nor edema. Laboratory showed a white blood cell count of 11.71 bil/L with 4.2 x 10^9/L eosinophils. He had acute diastolic congestive heart failure with elevated ProBNP at 10,461 pg/ml with elevated filling pressures which required Milrinone. For his acute post-transplant cellular rejection, he was started on high dose intravenous steroids, Thymoglobulin, and intravenous immunoglobulin. He continued his maintenance immunosuppression of Tacrolimus and