Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

the pediatric population. Elucidating this could allow children easier access to follow-up medical care and the ability to return to school following illness.

M405

COVID-19 ASSOCIATED EOSINOPHILIC LICHEN PLANUS

G. Hudes*[1], M. Weingarten[2], D. Sanchez Tejera[1],
1. Bronx, NY; 2. New York, NM.

Introduction: Previous reports associate lichen planus (LP) eruptions with viral infection. Possible surge of LP is reported with COVID-19. We present the first case of COVID-19 associated LP in the presence of eosinophilia.

Case Description: A 24-year old female with a history of atopic eczema and mild intermittent asthma since childhood presented with an itchy rash on her hands and toes. The rash had commenced a few months prior and was associated with concurrent flu-like symptoms. She was not tested for COVID-19. Elimination of potential allergens did not result in symptom resolution. Physical exam revealed a macular, dusky, asymmetric and mostly pruritic rash. Laboratory data revealed new onset of peripheral eosinophilia and lack of coagulopathy. COVID antibodies were positive. A clotrimazole-betamethasone regimen proved ineffective. Subsequent biopsy showed LP with eosinophils. Topical steroids resolved the pruritus, and the lesions are healing.

Discussion: Following reports associating LP with viral infection, a lichenoid eruption in tandem with COVID-19 symptoms and a subsequent positive antibody test promotes a possible association between LP and COVID-19. Eosinophils are rare in LP with exception of hypertrophic LP which favors the lower extremities. While COVID-19 often presents with eosinopenia, our patient's eosinophilia merits further investigation. This is particularly true in the context of preclinical studies arguing that eosinophils have antiviral functions. A possible association between LP and COVID-19 would also be an important addition to diagnostic differentials, especially among multiple reports of painful yet non-pruritic chilblain eruptions in the same location.

M406

SELF-LIMITED COVID-19 INFECTION IN ARTEMIS HYPOMORPHIC SCID: ARE B CELLS DISPENSABLE?

S. Gabryszewski*, D. Sun, S. Jyonouchi, K. Sullivan,
S. Henrickson, *Philadelphia, PA.*

Introduction: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV2), the etiologic agent of coronavirus disease 2019 (COVID-19), causes variable clinical manifestations, ranging from asymptomatic disease to immune dysregulation and multi-organ failure. The immunologic features of COVID-19 are incompletely understood. From reports of resolved COVID-19 infection in patients with primary antibody deficiency, it has been postulated that B cells may be dispensable for immunologic clearance.

Case Description: A 14-month-old female patient with compound heterozygous mutation (maternal deletion and paternal missense mutation) in *DCLRE1C* (Artemis) presented on day 2 of illness with rhinorrhea, congestion, cough, and transient fever. She was PCR-positive for SARS-CoV2. Prior immunophenotyping showed normal NK cell numbers, near-absent B cells ($CD19^+$ 42), T cell lymphopenia ($CD3^+$ 743), declining phytohemagglutinin mitogen testing (last 37% of control), and polyclonal T-cell repertoire, consistent with the diagnosis of hypomorphic severe combined immunodeficiency (SCID). Admission workup demonstrated lymphopenia (ALC 720); normal CRP; elevations in IFN-gamma (40.5), IL-8 (19.7), and TNF-alpha (5.8); and minimal Burr cells with no schistocytes on peripheral blood smear. She was discharged after 36 hours of observation.

Discussion: Given this patient's unclear clinical trajectory at presentation, the decision was made to admit for further evaluation. Remarkably, despite T cell dysfunction and near-absence of B cells, she improved without medical intervention. This outcome lends credence to the notion that B cells may be dispensable for clinical resolution of COVID-19 infection. Further elucidation of immune responses to SARS-CoV2 will benefit from continued surveillance of clinical outcomes in patients with defined immunologic deficits.

M407

COMPLICATIONS OF CORONAVIRUS IN A PATIENT WITH CVID

D. Urschel*[1], M. Cardenas-Morales[1], V. Hernandez-Trujillo[2],
1. Miami, FL; 2. Miami Lakes, FL.

Introduction: 29-year-old with common variable immunodeficiency, lymphangiomatosis, portal hypertension status post TIPS procedure was lost to follow up. He was off gamma globulin and prophylactic antibiotics for fourteen months prior to presentation secondary to insurance issues. Early February 2020 patient presented with abdominal distension and hemoptysis. He denied fever, shortness of breath or additional respiratory symptoms. Initial CT of chest showed basilar cavitary infiltrate. Coronavirus PCR testing was positive, presumed SARS-CoV2. Immunoglobulin G level was 467.

Case Description: He was started on empiric broad spectrum antibiotics, antifungals and immunoglobulin replacement. He developed fever, worsening respiratory symptoms, and lower lobe infiltrates soon after admission. Bronchoscopy was performed, and culture was positive for Aspergillus. Blood culture was positive for Streptococcus Agalactiae. Paracentesis, TIPS check with balloon dilation, and splenic artery aneurysm coiling were performed. He developed thrombosis of greater saphenous vein and was started on anticoagulation. He required oxygen supplementation, but not intubation. Patient gradually improved and was discharged after seventeen days hospitalization. He was continued on antibiotic, antifungal, and anticoagulation at discharge. Outpatient follow up was arranged with Immunology, subcutaneous immunoglobulin was resumed, and he continues to clinically improve to baseline three months after discharge.

Discussion: The knowledge of SARS-CoV2 infections in patients with underlying Immunodeficiency is rapidly evolving. Immunodeficiency has been speculated to protect against cytokine storm and hyper inflammation from COVID-19. Markers of cytokine storm were not measured during our patient's admission. However, despite coinfections and additional sequelae, our patient had no evidence of ARDS or requirement for prolonged respiratory support.

M408

AN UNUSUAL MISSED DIAGNOSIS OF MULTIFACETED CLINICAL CASE OF CORONAVIRUS DISEASE 2019 MIMICKING UNCONTROLLED ASTHMA

S. Nsouli*, *Danville, CA.*

Introduction: A patient with progressive shortness of breath, dry cough, tightness of the chest, mimic uncontrolled asthma. A diagnosis of coronavirus disease 2019 (COVID-19) infection might be delayed if a chest CT scan is not done (after abnormality of chest X-ray), despite a negative nasopharyngeal swab test reverse transcription, polymerase chain reaction (RT-PCR) assay.

Case Description: A 68-year old female presented to us with progressive shortness of breath worsening over 12 days, a dry cough, and tightness of the chest. Her primary care diagnosed her with severe persistent asthma and prescribed an inhaled bronchodilator, corticosteroid, anticholinergic and montelukast with a course of oral corticosteroid. The patient came to our clinic due to the worsening of symptoms despite the step-up therapy for asthma. Physical examination revealed decreased airflow and bilateral rales in both lungs, blood pressure: 137/78, temperature 38.9 C, heart