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high index of suspicion of KS as a cause of perioperative myocardial ischemia is needed for accurate diagnosis and treatment guidance. A comprehensive allergic evaluation and identification of triggers are essential to provide individualized recommendations and minimize the risk of re-exposure on subsequent procedures.

## M028

### A NEAR DRESS EXPERIENCE

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**Introduction:** A 48-year-old gentleman with Loey-Dietz syndrome and complicated pancreatitis was seen for antibiotic selection with history of multiple reactions concerning for severe delayed type hypersensitivity reactions.

**Case Description:** Patient had been admitted multiple times over the previous two months for management of complex pancreatitis complicated by vancomycin resistant enterococcus. He first developed maculopapular rash and fever two weeks after treatment with vancomycin and daptomycin. The following month, he developed fever, facial flushing, acute kidney injury, and elevated aminotransferases with exposure to daptomycin and meropenem. Both episodes were associated with peripheral eosinophilia > 1000. Avoidance of these antibiotics was advised given concern for drug reaction with eosinophilia and systemic symptoms. On re-evaluation three months later, he continued to have fluctuations in eosinophil count coinciding with stress and illness even in the absence of antibiotic therapy. We hypothesized that his eosinophilia was most likely reactive to infection and stress in the setting of underlying Loey-Dietz syndrome, which causes peripheral eosinophilia possibly secondary to increase Th2 cytokine release. He was successfully treated with tigecycline and ceftazidime/avibactam, and has not required hospitalization since.

**Discussion:** In this case, a significant illness and a rare connective tissue disorder associated with eosinophilia combined to mimic a life-threatening delayed hypersensitivity reaction. As such, a more conservative approach with withholding high-risk antibiotics was reasonable at first, until further data was obtained several months later. Keeping a log of interventions and blood counts over time is an invaluable tool in the evaluation for hypereosinophilia.

## M029

### CYTOKINE RELEASE SYNDROME SECONDARY TO BENRALIZUMAB

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**Introduction:** Benralizumab is a monoclonal antibody (mAb) used as an add-on therapy for severe eosinophilic asthma. We present a case of hypersensitivity secondary to benralizumab.

**Case Description:** Our 71-year-old female patient had severe persistent eosinophilic asthma not controlled with a combination of a high-dose inhaled corticosteroid and a long acting beta agonist. Furthermore, she required frequent courses of systemic corticosteroids for her asthma. Two hours after receiving her first dose of benralizumab, she developed diffuse generalized myalgia, chills without fever, nausea without vomiting. She denied any objective IgE-mediated findings. Vital signs were within normal range except for mild tachycardia. The patient was admitted for observation where she received intravenous corticosteroids and fluids. Her symptoms improved within 6 hours. Laboratory evaluation revealed elevated IL-6 (11.5 pg/mL; reference <1.8 pg/mL). The patient is currently awaiting prior authorization for use of an alternative mAb.

**Discussion:** Here we present a case of cytokine release syndrome secondary to benralizumab. mAbs can cause hypersensitivity reactions, which in this case might be related to the ability of benralizumab to cause antibody-dependent cell-mediated

cytotoxicity of eosinophils and basophils. With the exception of omalizumab, where the waiting time after administration is 2 hours after the first three doses, there is no recommendation as to the waiting time for other mAbs.

## M030

### RITUXIMAB-INDUCED SERUM SICKNESS IN A PEDIATRIC PATIENT WITH MULTIPLE AUTOIMMUNE DISEASES AND HISTORY OF COVID-19

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**Introduction:** Serum sickness, an immune-complex-mediated hypersensitivity reaction, is more common in adults than children. Rituximab has been reported as an agent that can cause serum sickness. This case discusses a pediatric patient who developed rituximab-induced serum sickness in the setting of a positive history of COVID-19 and recently diagnosed neuromyelitis optica, celiac disease, immune thrombocytopenia, and Sjogren's syndrome.

**Case Description:** Our patient is a previously healthy 10-year-old female who contracted COVID-19 without complications, and two months later developed eye pain with decreased vision, weakness, fatigue, urinary retention, and poor appetite with weight loss. She was diagnosed with celiac disease and neuromyelitis optica. She received pulse steroids, plasmapheresis, and rituximab. Twelve days after her first dose of rituximab, and prior to the second dose, she developed fever and a diffuse nonpruritic erythematous rash, which worsened during the second dose. She also had transient polyarthralgia. Laboratory findings demonstrated leukopenia with neutropenia and lymphopenia, thrombocytopenia, elevated CRP, elevated liver enzymes, positive anti-SS-A, and elevated C4 level. A diagnosis of rituximab-induced serum sickness was made. She improved with cessation of rituximab and treatment with antihistamines and steroids.

**Discussion:** This patient's presentation of rituximab-induced serum sickness in the setting of multiple autoimmune disorders is notable, particularly given her age and COVID-19 history. Rituximab-induced serum sickness has been shown to be more frequent in patients with autoimmune diseases. It is unknown if her COVID-19 history is directly relevant to her overall clinical picture, but it is important to mention given reports of COVID-19 leading to autoimmune and autoinflammatory diseases in children.

## M031

### DRESSED FOR SUCCESS: BRAF INHIBITOR DENSITIZATION AFTER DRUG REACTION WITH EOSINOPHILIA AND SYSTEMIC SYSTEMS (DRESS)

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**Introduction:** DRESS is a potentially life-threatening, drug-induced hypersensitivity reaction characterized by prolonged latency period. Standard of care is prompt identification and cessation of the culprit drug. BRAF inhibitors (BRAFi) are a growing class of targeted, small-molecule drugs for which rashes of varying severity are frequently seen.

**Case Description:** 41-year-old female with Stage IV melanoma with liver and lung metastasis presented with multiple adverse reactions to BRAFi. Approximately 2 weeks after starting dabrafenib and trametinib, she developed fevers, maculopapular rash on bilateral extremities and trunk, facial swelling and lethargy that progressed to hypotension with acute kidney and liver injury. Labs were notable for creatinine 1.6 mg/dL, aspartate aminotransferase (AST) 266 U/L, alanine aminotransferase (ALT) 133 U/L and 30 eosinophils. Dabrafenib and trametinib were stopped, and symptoms resolved on high-dose solumedrol and prednisone taper. One month later, encorafenib and binimetinib were trialed and