

testing to progesterone was positive(0.005mg/ml). Upon collaboration with her parents, pediatrician, and gynecologist, she was started on an oral contraceptive and topical tacrolimus. With continued consistent treatment, her rashes have remained dormant.

**Discussion:** Catamenial Dermatitis is a rare disorder that is difficult to diagnose and is likely underdiagnosed. This case demonstrates the importance of a detailed history and multidisciplinary approach for successful patient outcomes.

With each menstrual cycle, this area becomes erythematous, pruritic and then heels with melanotic appearing hyperpigmentation. The lesions to the face continue to spread and are disfiguring.



## M557

### SUCCESSFUL TREATMENT AND COMPLETE STEROID SPARING USING OMALIZUMAB IN BULLOUS PEMPHIGOID MASQUERADING AS REFRACTORY URTICARIA



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**Introduction:** The classic form of bullous pemphigoid (BP) presents with widespread tense bullae; however, early presentations of BP can be non-specific: pruritus alone, eczema, or urticaria. Prednisone is the typical first-line treatment for extensive disease. Traditionally, IgG autoantibodies against hemidesmosome components were the focus of this condition, but more recently, the pathogenicity of IgE autoantibodies has emerged and its blockade as a therapeutic target using omalizumab has been successfully described.

**Case Description:** A 78-year-old male was seen in clinic for severe chronic hives located on his arms and trunk. Chronic spontaneous urticaria was the working diagnosis, but he did not respond to maximally tolerated doses of antihistamines and thus, an application for omalizumab was made. In the interim, a skin biopsy described findings consistent with BP. As such, in addition to omalizumab, he was started on prednisone 15 mg and methotrexate 2.5 mg/day as well July 2018. As of March 2019, he was weaned completely off of prednisone, and by April 2020, he stopped methotrexate and achieved remission with omalizumab and bilastine PRN.

**Discussion:** Since obvious bullous lesions may be absent in early BP, diagnosis can be challenging and requires a high degree of clinical suspicion, especially in patients older than 60 years old presenting with new-onset refractory urticaria. Even in the setting of biopsy-proven BP, omalizumab was effective in controlling urticaria for this patient. This case lends support to the existing literature on omalizumab as a possible treatment modality in BP. Controlled studies are needed to rigorously establish omalizumab's efficacy in BP.

## M558

### STEROID SPARING BENEFIT OF OMALIZUMAB IN A PATIENT WITH BULLOUS PEMPHIGOID AND METASTATIC SALIVARY CANCER



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**Introduction:** Prednisone and conventional immunosuppressants such as mycophenolate mofetil are commonly employed in treatment of extensive bullous pemphigoid (BP). However, broad immunosuppression is undesirable in the setting of malignancy. Traditionally, IgG autoantibodies were the focus of this condition, but more recently, the pathogenicity of IgE autoantibodies has emerged and its blockade as a therapeutic target using omalizumab has been successfully described.

**Case Description:** A 75-year-old male with BP was urgently seen in allergy clinic for consideration of omalizumab in the context of newly diagnosed metastatic acinic salivary carcinoma, whereby his dermatologist and otolaryngologist highly desired to taper prednisone and avoid broad immunosuppressants. He had an inadequate response to antihistamines and potent topical steroids; also, a trial of tetracycline caused a delayed maculopapular rash, which was reproduced when patient re-challenged himself. Although mycophenolate mofetil and IVIG were proposed as alternatives, otolaryngology cautiously advised against these agents given his widespread active malignancy. After 2 doses of omalizumab, he had a >90% improvement in pruritus and was able to taper prednisone from 30 to 5 mg.

**Discussion:** Given significant side effects and broad immunosuppression associated with prednisone and conventional immunosuppressants, alternative treatments with a narrower spectrum of activity should be considered, such as targeted anti-IgE blockade with omalizumab. This case lends support to the existing literature on omalizumab as a possible treatment modality in BP, especially when corticosteroids alone fail to control the disease or in the presence comorbidities limiting the use of immunosuppressants. Controlled studies are needed to rigorously establish omalizumab's efficacy in bullous pemphigoid.

## M559

### SUCCESSFUL TREATMENT AND STEROID SPARING USING OMALIZUMAB FOR BULLOUS PEMPHIGOID REQUIRING PREDNISONE AND INTRAVENOUS IMMUNOGLOBULIN



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**Introduction:** Prednisone is often used first-line for extensive bullous pemphigoid (BP), but limited by comorbidities and adverse effects. Concomitant liver disease further limits steroid sparing options. In these circumstances, alternatives are few, such as tetracyclines, IVIG, and biologics. More recently, the pathogenicity of IgE autoantibodies has emerged and its blockade as a therapeutic target using omalizumab has been successfully described.

**Case Description:** A 63-year old female with prednisone-dependent bullous pemphigoid was seen in allergy clinic February 2018 for consideration of omalizumab due to significant cardiometabolic comorbidities and fatty liver, after failing steroid sparing with tetracycline and IVIG. Omalizumab 300 mg SC q4weeks was started May 2018 alongside prednisone 10 mg and IVIG 80 mg x 2 days per month. By October 2018, she was weaned to prednisone 5 mg/day as a maintenance due to adrenal insufficiency. By Nov 2018, she was off of IVIG and decreased to tetracycline to 500 mg/day. Since her BP was well-controlled since December 2018, she was able to stop omalizumab in March 2019 and has remained in remission.

**Discussion:** Given adverse effects associated with prednisone and resource-intensive requirements of administering intravenous immunoglobulin therapy, alternative treatments with a better safety profile and less invasive route of administration should be

considered, such as targeted anti-IgE blockade with omalizumab. This case lends support to the existing literature on omalizumab as a possible treatment modality in BP, especially when corticosteroids and other second-line therapies are limited by comorbidities and adverse effects. Controlled studies are needed to rigorously establish omalizumab's efficacy in BP.

## M560

### THE STUBBORN RASH

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**Introduction:** Cutaneous T cell lymphoma presenting as suspected drug rash is described.

**Case Description:** A 64-year-old male with rheumatoid arthritis presents for evaluation of progressive skin rash. He initially notes diffuse xerosis three years prior, is diagnosed with eczema, and started on topical corticosteroids. One year later, rheumatology initiates methotrexate and he developed worsening skin rash. Given their concern for drug rash, methotrexate is stopped, and he is trialed on adalimumab and sulfasalazine in succession, but the rash persists for greater than one year. It transiently improves with oral corticosteroid tapers. Skin biopsy while on adalimumab reveals superficial and deep perivascular and periadnexal lymphohistiocytic infiltrate with numerous eosinophils. Eight months later, he is evaluated by allergy. All medications are discontinued one month prior. Examination reveals pruritic, indurated plaques with nodularity on the trunk and upper extremities. CBC and CMP are unremarkable without eosinophilia. Repeat skin biopsy is performed given rash progression. It now reveals atypical lymphoid infiltrate, predominantly T cells with a preponderance of CD4+ variably sized cells. T cell  $\beta$  and  $\gamma$  gene rearrangement shows a monoclonal population. Oncology performs further evaluation with bone marrow biopsy, PET scan, and lymph node biopsy and he is diagnosed with stage IIB mycosis fungoides with large cell transformation. He is initiated on INF- $\alpha$  with total skin external beam radiation therapy.

**Discussion:** This case demonstrates the importance of including cutaneous T cell lymphoma in the differential diagnosis of rashes encountered by allergists and stresses the need to reconsider the diagnosis if they fail to respond to conventional treatment.



Appearance of erythematous indurated plaques with nodularity on the patient's trunk and upper extremities at time of presentation for re-biopsy.

## M561

### DUPILUMAB FOR TREATMENT OF SEVERE ATOPIC DERMATITIS IN CHILDREN UNDER 6 YEARS

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**Introduction:** Dupilumab is a monoclonal antibody against the interleukin (IL)-4 receptor alpha subunit of the IL-4 and IL-13 receptor. It is approved for the treatment of severe atopic dermatitis (AD) above six years of age. We present a patient with severe AD under six years of age inadequately controlled by other therapies who noticed substantial improvement with Dupilumab.

**Case Description:** A 23-month-old male patient presented with severe AD with 85% body surface area (BSA) involvement, Investigator Global Assessment (IGA) Grade 4 disease and a Dermatology Life Quality Index (DLQI) score of 27. He failed to improve on aggressive topical steroids, oral steroids, antihistamines, antibiotics, and dietary management. He developed multiple complications like eczema herpeticum, oral thrush, and secondary bacterial infection of excoriated skin lesions. He was started on Dupilumab 6-10 mg/kg body weight subcutaneous injections every two weeks. Over 6 months, he improved to 70% BSA involvement with IGA Grade 2 disease and a DLQI score of 3.

**Discussion:** Dosing strategy was adapted from ongoing clinical trial data. No adverse events were noted. Currently accepted systemic

