Use of Tralokinumab in the Management of Bullous Pemphigoid

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Introduction

- **Bullous pemphigoid (BP)** is an autoimmune blistering disorder characterized by severe pruritus and tense bullae.
- Standard therapies include topical or systemic corticosteroids, but long-term use carries significant adverse effects.[1]
- **Biologic immunotherapies** targeting the Th2 immune response (IL-4, IL-5, IL-13) have emerged as promising alternatives for refractory BP.
- **Tralokinumab**, a monoclonal antibody that selectively inhibits IL-13, represents a novel therapeutic option with potential efficacy in patients with refractory BP.

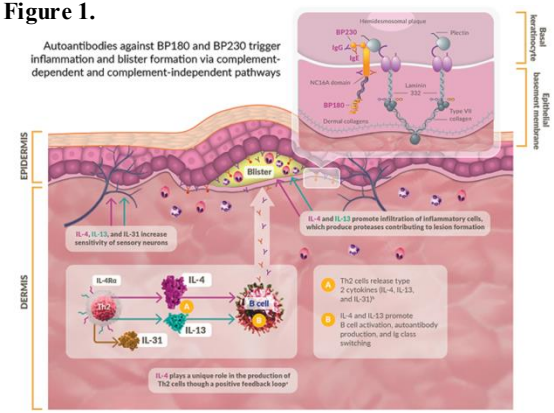
Case Presentation

- The patient is an 87-year-old female with a PMH of asthma and depression who presented with a 14-month history of severe generalized pruritus and tense bullae on the trunk and extremities.
- She was previously diagnosed with bullous pemphigoid by her allergist based on clinical examination and positive serum IIF testing.
- Prior treatment with prednisone and doxycycline over approximately 12 months provided intermittent symptom relief but was complicated by hypertension, prediabetes, and a 40-lb weight gain.
- At her initial dermatology evaluation, she had discontinued prednisone, reported a PP-NRS of 10/10, and had multiple active bullae on examination.

Management

- The patient received a 600 mg loading dose of dupilumab followed by 300 mg every 2 weeks for 12 months. Complete cutaneous clearance was achieved, but treatment was discontinued due to progressive arthralgia.
- Tralokinumab was started after dupilumab discontinuation. Within 4 months, the patient achieved complete resolution of pruritus and sustained clearance.
- Experienced a mild flare in the first month which resolved spontaneously, after which the treatment was well tolerated with no ongoing adverse effects

Figure 1.



[a]IL-4 acts on both type I and type II receptors to mediate type 2 inflammation.[2]
[b]Type 2 cytokines (such as IL-4, IL-13, and IL-31) may also be produced by other immune cells, such as ILC2.[11,12]

Figure 1. Proposed mechanism of action of dupilumab in bullous pemphigoid: Inhibition of IL-4 and IL-13 signaling to reduce type 2 inflammation. Adapted from DUPIXENT® HCP (n.d.).

Discussion

- Traditional BP management relies on corticosteroids, with doxycycline or methotrexate as alternatives for steroid-intolerant patients.
- Biologic therapies targeting Th2 pathways have shown high rates of disease remission with favorable safety profiles.[2]
- Dupilumab (IL-4/IL-13 inhibitor) is effective but may cause arthralgia or inflammatory arthritis.
- Tralokinumab, an IL-13 selective monoclonal antibody, offers a novel therapeutic option for BP, modulating Th2-mediated inflammation and reducing disease activity.[3]
- This case demonstrates that tralokinumab can provide sustained symptom control in severe, refractory BP with good tolerability.
- While data on adverse effects in BP are limited, experience from atopic dermatitis trials suggests it is generally well tolerated.[4,5]

References

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