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Dupilumab as maintenance therapy in steroid-dependent eosinophilic enteritis: a multidisciplinary approach

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KEYWORDS: Eosinophilic gastrointestinal disorders. Eosinophilic ascites. Biologic therapy. Steroid-sparing therapy. Multidisciplinary care.

Dear Editor,

Eosinophilic enteritis (EE) is a rare immune-mediated disorder characterized by eosinophilic infiltration of the small bowel, with heterogeneous clinical manifestations depending on the affected layer[1]. Although systemic corticosteroids remain the treatment of choice during acute flares, there is currently no standardized maintenance therapy, and long-term steroid exposure is associated with significant adverse effects. Dupilumab has shown efficacy in eosinophilic esophagitis and other type-2 inflammatory diseases, but its use in EE remains off-label, with limited published experience[2,3,4,5].

CASE REPORT

We report the case of a 27-year-old man with prior surgery for nasal polyposis and EE diagnosed five years earlier. At disease onset, he presented with a three-week history of abdominal pain, distension, diarrhea and marked peripheral eosinophilia. Abdominal imaging showed diffuse jejunal wall thickening with associated ascites. Diagnostic paracentesis revealed eosinophil-rich ascitic fluid. Parasitic infections were excluded. Gastroscopy and ileocolonoscopy with stepwise biopsies were histologically unremarkable. He responded rapidly to systemic corticosteroids on a tapering regimen.

He remained in clinical remission for approximately three years with proton pump inhibitor (PPI) therapy and empirical dietary restrictions including dairy, fish and seafood (by personal preference). In the most recent year, he presented with recurrent flares requiring multiple courses of prednisone. Tapering from 10 to 5 mg/day failed due to clinical and biochemical relapse. Oral budesonide was also

ineffective.

These recurrences prompted multidisciplinary reassessment. Allergy assessment identified previously undiagnosed mild asthma, treated with inhaled corticosteroids. Subsequent hematology and internal medicine evaluations excluded primary hypereosinophilic syndromes and eosinophilic granulomatosis with polyangiitis.

Off-label Dupilumab was initiated at 300 mg every two weeks, with progressive corticosteroid withdrawal. The patient achieved complete clinical remission, with resolution of gastrointestinal symptoms. A transient early increase in peripheral eosinophils was observed without clinical relevance. After one year of follow-up, the patient remains asymptomatic on Dupilumab monotherapy, has successfully reintroduced previously restricted foods, and requires only occasional on-demand PPI for heartburn. Inhaled corticosteroids were discontinued after objective improvement in spirometry.

DISCUSSION

This case highlights the potential role of Dupilumab as a steroid-sparing maintenance therapy in EE. Careful exclusion of alternative causes of eosinophilia and a multidisciplinary approach are essential before initiating long-term biologic treatment. Although Dupilumab remains off-label for EE, accumulating case-based evidence suggests it may provide sustained remission with a favourable safety profile. Further studies are needed to define its long-term efficacy, optimal dosing and position in the therapeutic algorithm of EE.

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CONFLICT OF INTERESTS:

Authors declare no Conflict of Interests for this article.

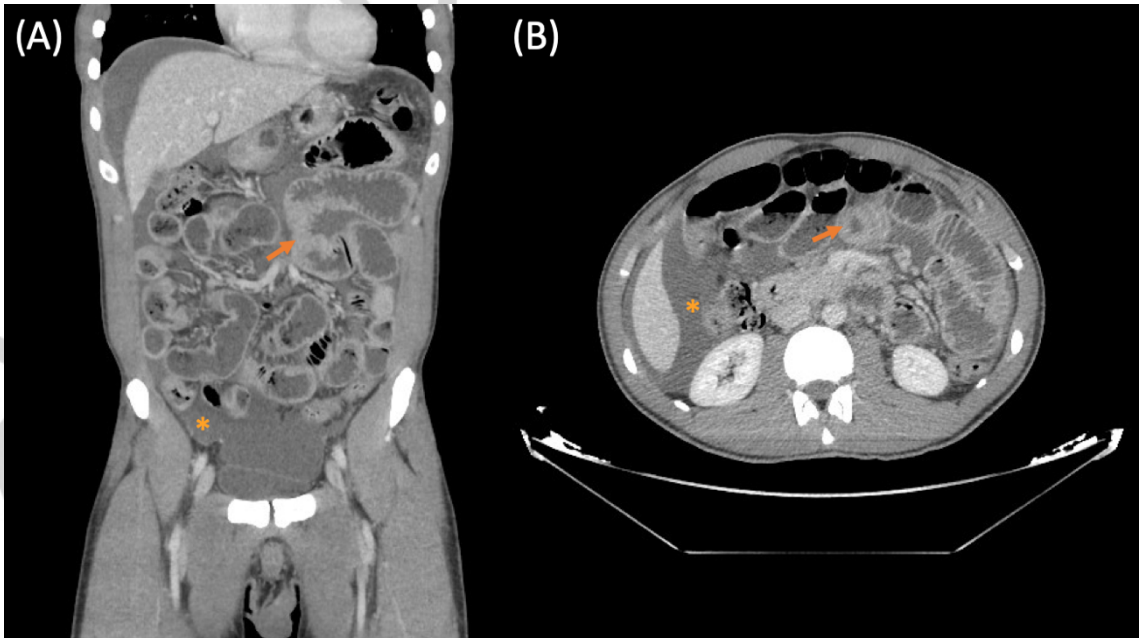

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Figure 1 : Abdominal CT scan demonstrating diffuse jejunal wall thickening (arrow) with associated ascites (asterisk) on coronal (A) and axial (B) views.