



POSTERS

ATOPIC DERMATITIS AND ULCERATIVE COLITIS: A CASE REPORT ON THE MANAGEMENT OF OVERLAPPING COMORBIDITIES**S. Senatore¹, C. Cardinali¹, A. Pieraccini², F. Taviti¹**¹SOC Dermatologia Pistoia-Prato, USL Toscana Centro, Italy; ²SOC Gastroenterologia ed Endoscopia, USL Toscana Centro, Italy**Keywords:** Atopic-Dermatits, Comorbidities.

Atopic dermatitis (AD) and ulcerative colitis (UC) are both considered barrier diseases.¹ The association between AD and inflammatory bowel disease (IBD) has been reported in literature. Cohort studies estimated an increased risk of IBD in AD patients ranging from 27–40% in adults, likely reflecting shared Th2 immunological pathways.² Although Crohn's disease is Th1-driven, UC presents an atypical Th2 profile in which IL-13, produced by natural killer T cells, is the pivotal cytokine rather than IL-4.⁴ In the initial phases, Th1 cytokines prevail; the Th2 profile consolidates only in the late phase.⁵ A 48-year-old patient came to our attention for severe AD involving face and neck. Prior treatments, methotrexate, tralokinumab and dupilumab, had all provided poor results; dupilumab additionally triggered severe conjunctivitis, prompting its suspension. He had been affected by UC since 2005, treated first with mesalazine and subsequently with infliximab, still ongoing due to clinical and endoscopic worsening. His medical history included arterial hypertension, diabetes and, crucially, multiple thromboembolic events. At presentation, erythematous scaly lesions involved face, scalp and neck, with severe periorificial involvement; the conjunctivae were visibly inflamed and lichenification was present at popliteal spaces and ankles. EASI was 9.4, while SCORAD was 57.6, emphasizing the symptomatic burden. Although upadacitinib, a selective JAK1 inhibitor, could have addressed both conditions simultaneously, the patient's thromboembolic history led both dermatologists and gastroenterologists to exclude this option. A multidisciplinary re-evaluation was thus performed. Colonoscopy confirmed clinical remission, allowing infliximab to be suspended. Lebrikizumab, an anti-IL-13 monoclonal antibody, was

initiated; unlike other IL-13 inhibitors, it binds IL-13 with high affinity while preserving natural cytokine clearance, contributing to its favourable safety profile. The patient is currently in follow-up. This case highlights the importance of comorbidities in AD management. The coexistence of AD and UC, sharing Th2 inflammatory patterns, requires a multidisciplinary approach. A prior history of thromboembolic events precluded JAK inhibitors, despite their recognized efficacy in both conditions, ultimately guiding therapeutic decisions towards lebrikizumab, targeting the IL-13 pathway in the context of UC remission.

References

1. Niwa Y, Sumi H, Akamatsu H. An Association Between Ulcerative Colitis and Atopic Dermatitis, Diseases of Impaired Superficial Barriers. *J Invest Dermatol.* 2004;123(5):999-1000. doi: 10.1111/j.0022-202X.2004.23485.x
2. Chiesa Fuxench ZC, Wan J, Wang S, Syed MN, Shin DB, Abuabara K, Gelfand JM. Risk of Inflammatory Bowel Disease in Patients With Atopic Dermatitis. *JAMA Dermatol.* 2023;159(10):1085-1092. doi: 10.1001/jamadermatol.2023.2875 [1]
3. Fuss IJ, Heller F, Boirivant M, Leon F, Yoshida M, Fichtner-Feigl S, Siebeck M, Terabe M, Blumberg RS, Nair N, Strober W. Nonclassical CD1d-restricted NK T cells that produce IL-13 characterize an atypical Th2 response in ulcerative colitis. *J Clin Invest.* 2004;113(10):1490-1497. doi: 10.1172/JCI19836
4. Fuss IJ, Strober W. The role of IL-13 and NK T cells in experimental and human ulcerative colitis. *Mucosal Immunol.* 2008;1(Suppl 1):S31-S33. doi: 10.1038/mi.2008.40
5. Saez A, Herrero-Fernandez B, Gomez-Bris R, Sanchez-Martinez H, Gonzalez-Granado JM. CD4 T-Cell Subsets and the Pathophysiology of Inflammatory Bowel Disease. *Int J Mol Sci.* 2023;24(3):2696. doi: 10.3390/ijms24032696