

Patient and Immune Phenotype

- A 37-year-old woman with NFKB2-associated common variable immunodeficiency (CVID), posterior uveitis, and alopecia totalis presented with recurrent painful, pruritic plaques.
- She was receiving intravenous immunoglobulin for B-cell deficiency and was maintained on methotrexate for uveitis. She experienced recurrent infections during prior mycophenolate therapy.

Clinical and Diagnostic Assessment

- High-potency topical corticosteroids failed to resolve the lesions. She was afebrile, with no reported leukocytosis or elevated inflammatory markers.
- Tender, edematous erythematous plaques and recurrent episodes provided the strongest support for **Sweet syndrome**.
- The initial biopsy showed papillary dermal edema and a mixed dermal inflammatory infiltrate of lymphocytes, neutrophils, and eosinophils. A repeat biopsy showed a superficial and deep perivascular and interstitial infiltrate of lymphocytes, neutrophils, and histiocytes. Although both biopsies contained neutrophils, neither demonstrated a dense neutrophilic infiltrate.
- Thus, the histopathologic findings were suggestive but not diagnostic of Sweet syndrome. Reactive granulomatous dermatitis remained in the differential.

Clinical and Histopathologic Findings



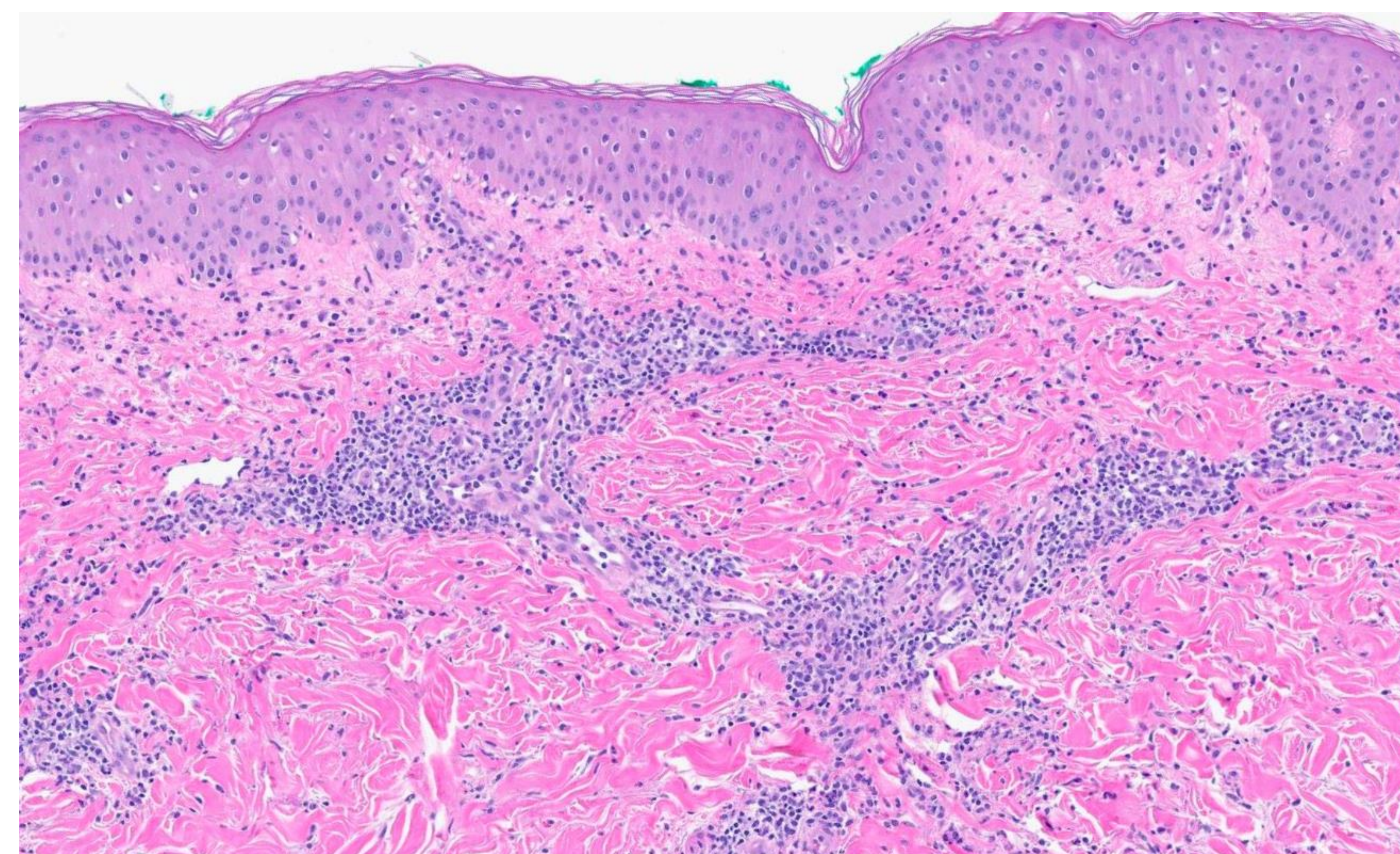
A. Left hip
Tender, edematous
erythematous plaque



B. Right breast
Smooth erythematous
plaque



C. Left inner thigh
Papules coalescing into
annular plaques



D. Perivascular and interstitial dermal inflammatory infiltrate with lymphocytes, neutrophils, and histiocytes.
H&E stain, 10x.

Discussion: Why This Case Matters

- NFKB2-associated disease can combine antibody deficiency with autoimmunity,¹ and neutrophilic dermatosis has previously been reported with an NFKB2 mutation.²
- Pathogenic NFKB2 variants have also been associated with alopecia areata, including alopecia totalis.³
- This patient's suspected Sweet syndrome may represent an additional manifestation of immune dysregulation alongside her CVID, posterior uveitis, and alopecia totalis. However, this case does not establish that her NFKB2 variant caused the eruption.
- Her multisystem disease also complicated treatment decisions. Control of skin and ocular inflammation required consideration of her underlying immunodeficiency and history of recurrent infections during immunosuppressive therapy.

Treatment and Follow-up

- A 21-day oral prednisone taper, starting at 60 mg/day, produced rapid improvement and complete resolution at follow-up. This response supported an inflammatory process but did not distinguish Sweet syndrome from other inflammatory dermatoses.
- Dapsone and JAK inhibition were discussed for future flares.
- Following primary treatment failure with baricitinib, ritlecitinib was selected for ongoing treatment of alopecia totalis, with potential benefit for suspected Sweet syndrome. She has had no further flares during 3 months of follow-up.