Abstract

Cutaneous lupus erythematosus (CLE) encompasses a broad range of clinical and histopathologic variants that can overlap with other dermatologic entities, complicating accurate diagnosis. We report the case of a 42-year-old male patient who initially presented with a diffuse pruritic eruption presumed to be atopic dermatitis, for which dupilumab was initiated. Within the following weeks, the patient developed a fever of unknown origin and diarrhea, raising concern for an atypical drug-related reaction or an unmasked autoimmune process. Subsequent biopsies demonstrated evolving histopathologic features, including superficial and deep perivascular dermatitis suggestive of drug eruption. In addition, a dermal mucin deposition with mixed neutrophilic and lymphocytic infiltrates is suggestive of cutaneous lupus, such as tumid lupus or lupus-related neutrophilic urticarial dermatosis.

Despite negative direct immunofluorescence and fluctuating autoantibodies, partial and sustained clinical improvement occurred with hydroxychloroquine therapy. The patient's variable serologic profile (including intermittent positivity for antiribonucleoprotein and anti-Smith), transient urticarial lesions, and evolving histopathology highlight the difficulties in definitively categorizing cutaneous lupus subtypes. While a direct causal link between dupilumab and lupus-like disease remains unproven, the temporal association raises the possibility that T helper type 1/T helper type 2 immune modulation may unmask subclinical autoimmune conditions.

This case underscores the importance of repeated clinicopathologic correlation and multidisciplinary surveillance in patients presenting with atypical or treatment-refractory dermatitis. Ongoing dermatologic and rheumatologic evaluation is critical for early detection of systemic involvement, especially when autoimmune etiologies are suspected. Hydroxychloroquine remains a cornerstone of therapy for many CLE variants and can provide substantial improvement, even in complex or overlapping clinical scenarios.