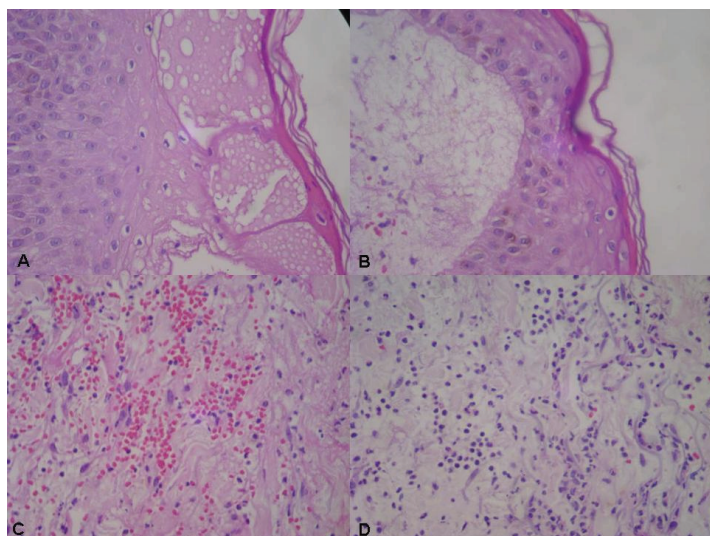


## Photoclinic Diagnosis:

## Bullous Sweet syndrome in chronic myeloid leukemia



**Figure 2.** **A)** Skin sample showing epidermic bullae (H&E stain, original magnification 40×); **B)** Conspicuous subepidermal edema (H&E stain, original magnification 40×); **C)** Neutrophilic infiltrate in the upper dermis and moderate erythrocyte extravasation in some areas. Features of vasculitis are absent (H&E stain, original magnification 40×); **D)** The mixed infiltrate of upper dermis contains predominant mature neutrophils.

The patient was diagnosed with Sweet syndrome (SS), or acute febrile neutrophilic dermatosis. SS is a broad spectrum condition, typically characterized by fever, neutrophilia, and cutaneous, and mucous lesions (erythematous, solid, and bullous), in addition to diffuse neutrophilic infiltrate in the upper dermis.<sup>1-5</sup> Genital ulcerations have been scarcely reported in SS,<sup>2,4</sup> which can be idiopathic, drug-induced, and associated with malignant tumors or hematologic malignancies.<sup>1-3,5</sup> In this patient, the diagnosis of SS was established by clinical, laboratory, and typical skin biopsy data (Figure 2)<sup>1-3,5</sup>; and characteristically, the conspicuous lesions improved rapidly after administration of corticosteroids.<sup>1,2</sup>

This case report emphasizes some concerns about SS associated with treated chronic myeloid leukemia (CML). First, because the syndrome can be due to CML or associated with the use of hydroxyurea.<sup>6</sup> Although leukemia cutis can mimic SS features,<sup>3</sup> histologic data ruled out this possibility. Second, the high level of CRP suggested some associated infection, but the hypothesis was not confirmed by blood and urine cultures, serologic tests or histopathologic tissue samples. Autonomic dysfunction and anemia due to leukemia can play a role in heart arrhythmias<sup>7</sup>; in addition, anemia can predict death in elderly patients that present with atrial fibrillation.<sup>8</sup>

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