# Sweet... Or not so sweet?

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## Abstract

Sweet Syndrome, or acute febrile neutrophilic dermatosis, is characterized by tender erythematous skin lesions (Figure 1 and 2) frequently associated with fever and leukocytosis. Despite being an uncommon inflammatory disease, it is triggered by infections, pregnancy, drugs and malignancy. We report a case of a man diagnosed with Sweet Syndrome.

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**Key Clinical Message:** Skin lesions compatible with Sweet Syndrome lead to the suspicion of multiple etiologies. Despite being uncommon, it is important to recognize it and know how to act, mainly due to its association with tumors and drugs.

**Abstract:** Sweet Syndrome, or acute febrile neutrophilic dermatosis, is characterized by tender erythematous skin lesions (Figure 1 and 2) frequently associated with fever and leukocytosis. Despite being an uncommon inflammatory disease, it is triggered by infections, pregnancy, drugs and malignancy. We report a case of a man diagnosed with Sweet Syndrome.

This case was previously presented as a poster at Update em Medicina 2022, on May 2022.

**Framework:** Sweet Syndrome is an uncommon, febrile inflammatory skin disease secondary to malignancy, infections and medications.

**Case description:** A 58-year-old male presented to a peripheral urgency center with complaints of a sudden skin rash located on his forehead, scalp, and neck (Figures 1 and 2) with three days of evolution. He denied pain, itching, fever and headaches. On examination, we found erythematous-based papules, nodules and pustules arranged in well demarked plaques on his forehead, scalp and cervical region. The patient denied chronic diseases, recent infections, heavy alcohol use and drug abuse. Oral prednisolone treatment was initiated, and complete blood count, biochemical, serological tests and chest x-ray only revealed a slight leukocytosis. After five days since the onset of prednisolone, the skin lesions had a marked regression (Figures 3 and 4). Complete resolution occurred after 35 days of the completion of the corticosteroid cycle.

**Discussion:** When facing Sweet Syndrome, it is essential to search for possible etiologies, since they have a high burden<sup>1,2,3</sup>. A patient-centered approach, with the investigation of potential causes and predisposing factors, combined with a sharp physical examination, effectively managed the case. Subsequent further studies and therapeutic with oral prednisolone prevented exacerbation of the lesions, as well as allowed for a faster etiological investigation<sup>2</sup>. Evaluation for malignancy should be considered when no other cause was

established and there is reasonable suspicion. However, if no malignancy is identified we must be alert as it may appear in the following years<sup>2,3</sup>.

Briefly, carrying out a complete clinical history, physical examination and a close follow-up of the patient is the key on the management of suspicions of this syndrome.

**Conclusion:** Despite being uncommon, Sweet Syndrome is a diagnosis to consider when facing sudden skin lesions on an adult. After conclusion of idiopathic etiology, patient follow-up is recommended.

Keywords: Sweet Syndrome; malignancy; management; follow-up

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## Author Contributions:

Cristina Saldanha: Responsible for acquisition of data, patient consent statement, library research and writing the manuscript.

Eduardo Rodrigues: Responsible for revising the manuscript and providing clinical judgement.

Hugo Leme: Responsible for acquisition of data and patient consent statement.

Ana Cristina Gouveia: Responsible for critical revision of the manuscript.

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Figure 1. Patient with multiple tender papules, pustules and plaques on his forehead.



Figure 2. Multiple tender papules and nodules located on the patient's neck.



Figure 3. Forehead lesions regression after five days since the onset of prednisolone.



Figure 4. Neck lesions regression after five days since the onset of prednisolone.

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