



INFLAMMATORY SKIN DISEASES (OTHER THAN ATOPIC DERMATITIS & PSORIASIS)

## SWEET'S SYNDROME

Alex Ortega Loayza <sup>(1)</sup>

*Oregon Health and Science University, Dermatology, Portland, United States Of America <sup>(1)</sup>*

Sweet's syndrome (SS) was originally described as "acute febrile neutrophilic dermatosis" by Dr. Sweet in 1964. It is a rare reactive and inflammatory disease which is considered to be the prototype disease of neutrophilic dermatoses.

The cellular and molecular mechanisms involved in SS have been difficult to elucidate due to the large variety of conditions leading to a common clinical presentation. The exact pathogenesis of SS is unclear.

The traditional description of tender erythematous plaques and nodules in association with leukocytosis and fever remains the prototypical presentation. However, other clinical variants including localized neutrophilic dermatosis of the dorsal hands, bullous, subcutaneous, cellulitic, and necrotizing lesions have been reported. Histopathologic variants include histiocytoid SS and SS with vasculitis which has been hypothesized to be a secondary reaction.

Sterile neutrophilic infiltrates have been found to affect internal organs in patients with SS supporting the concept of "neutrophilic disease". Extracutaneous involvement may also occur preceding, during, or following the appearance of skin lesions and they have been reported to involve the eyes, the central nervous system, visceral organs and musculoskeletal system.

As several cases have been described in literature, the classic clinical classification includes classic SS, drug-induced SS and malignancy-associated SS. The latter is currently an area of research as the significance of the presence of SS in term of prognosis remains unclear.

Patients respond promptly to high-dose systemic corticosteroids, however recalcitrant cases might have an associated hidden infection or malignancy. Other alternatives of treatment include mainly dapsone and colchicine. More recently, the use of biologics have been also reported being effective in cases of patients with SS.

In conclusion, understanding SS is important from a diagnostic and therapeutic perspective. As this can have broader implications in additional auto-inflammatory diseases as well as in neoplasms. Continued investigations into effective treatments and targeted therapy will benefit patients and improve our molecular understanding of SS and other inflammatory ailments.

