From Pancreatic Pain to Painful Plaques: A Cutaneous Clue to Systemic Inflammation

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INTRODUCTION

- Sweet Syndrome (SS), or acute febrile neutrophilic dermatosis, is an uncommon inflammatory skin disease.
- It is characterized by abrupt onset of fever, tender erythematous plaques, and systemic involvement.
- Most cases are idiopathic (classical), though SS may occur secondary to malignancy, infection, medications, or autoimmune disease.
- Ocular involvement, such as anterior uveitis, is rare but clinically significant.

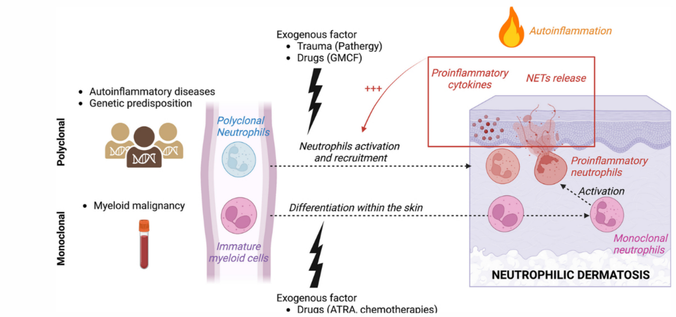
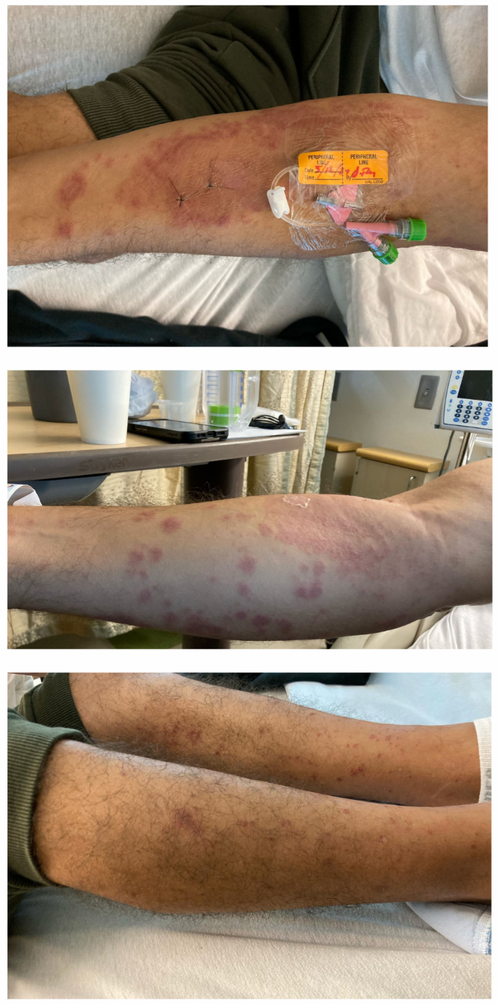


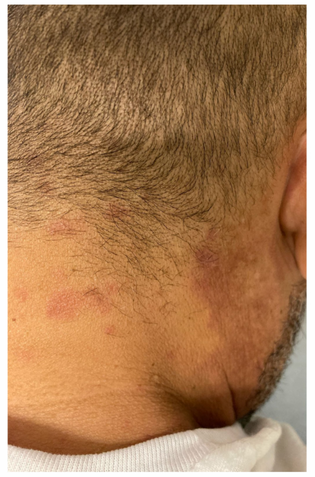
Figure 1. Schematic of neutrophilic pathophysiology. There are 2 main mechanisms: (i) a polyclonal hereditary activation of the innate immune system (ii) Clonal somatic activation of myeloid cells as encountered in myelodysplastic syndromes.

CASE PRESENTATION

- **Patient:** A 49-year-old man with a past medical history of hyperlipidemia and gastroesophageal reflux disease, recently hospitalized for acute pancreatitis.
- **Onset:** Progressive rash starting at intravenous (IV) sites post-discharge, spread to arms, chest, back, legs, and neck. Associated with fever, pruritus, photophobia, and bilateral eye pain.
- **Physical Exam:** Erythematous, edematous papules with desquamation at prior IV sites; spongiotic papules and confluent plaques on extremities and trunk; mild conjunctival injection.
- **Workup:**
  - Elevated CRP (226 mg/L), macrocytic anemia (Hgb 10-11, MCV 103).
  - CT: residual pancreatic inflammation.
  - Biopsy: neutrophilic dermal infiltrates consistent with SS.
  - Extensive workup was negative except for positive serology with anti-parietal cell antibodies consistent with pernicious anemia.
- **Management:**
  - IV methylprednisolone (40 mg) resulted in rapid clinical improvement over the next 5 days.
  - Ophthalmology: bilateral anterior uveitis treated with topical prednisolone acetate and atropine eye drops.
- **Discharge:** oral prednisone and B12 supplementation.
- **Outcome:** Full resolution; prednisone tapered successfully with no recurrence to date.

CUTANEOUS FINDINGS





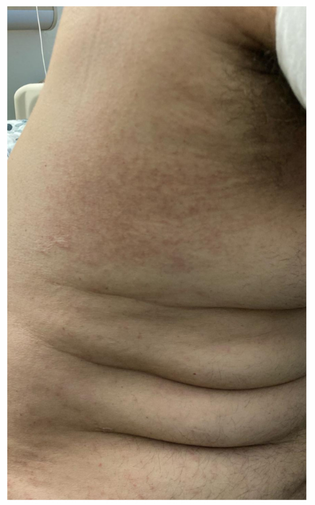


Table 1. Diagnostic criteria for Sweet Syndrome

Major criteria

1. Sudden onset of tender plaques or nodules
2. Histology: neutrophilic infiltrate in the dermis without vasculitis

Minor criteria

1. Fever >38°C
2. Illness preceded or associated with infection, inflammatory disorder, malignancy or pregnancy
3. Increased inflammatory markers and white cell count with neutrophil predominance
4. Positive response to corticosteroids

Two major criteria combined with two of the four minor criteria must be met for diagnosis.

KEY POINTS

- SS can manifest after acute inflammatory states such as acute pancreatitis.
- Ocular involvement (anterior uveitis) may accompany cutaneous SS, demonstrating its systemic impact, requiring multidisciplinary management.
- Concomitant autoimmune features (e.g., pernicious anemia) suggests the possibility of shared immune dysregulation.
- Corticosteroid therapy remains the cornerstone of treatment, with rapid clinical responsiveness within 48 hours. The steroid dose is tapered over 4 to 6 weeks.

CONCLUSION

- This case contributes to the limited literature on SS following idiopathic acute pancreatitis with ocular involvement.
- The co-occurrence with pernicious anemia suggests a potential autoimmune mechanism linking these conditions.
- Clinicians should maintain high suspicion for SS when evaluating dermatologic eruptions in the setting of systemic inflammation to ensure timely diagnosis and treatment and prevent negative outcomes.

REFERENCES

Please scan for a complete list of references