Recurrent facial abscess: A rare presentation of pyoderma gangrenosum

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ABSTRACT

Introduction: Nonhealing or recurrent facial abscesses or cellulitis are rare conditions that warrant further workup. Particularly in patients with inflammatory bowel disease, clinicians must be aware of neutrophilic dermatoses like pyoderma gangrenosum masquerading as infection.

Case: A 26 year old male presents with 6-week history of persistent worsening right-sided preauricular aseptic abscess now with a nonhealing draining wound. The patient underwent incision and drainage three times by Plastic Surgery and was treated with antibiotics with abscess reformation after each round of antibiotics. He had a history of ulcerative colitis and was having a flare on admission. On workup, he was diagnosed with pyoderma gangrenosum and began treatment with steroids and immunosuppressants. His swelling improved within 24 hours of beginning treatment and resolved after 1-2 weeks.

Discussion: This case illustrates the importance of considering neutrophilic dermatoses when treating aseptic, recurrent, or nonhealing facial abscesses or cellulitis. Due to pathergy, multiple incision and drainage procedures can enlarge and worsen the abscess causing irreparable cosmetic damage. Appropriate treatment with steroids and immunosuppressants managed with Dermatology or Gastroenterology input can lead to rapid resolution.

INTRODUCTION

Facial abscesses and cellulitis are common problems otolaryngologists treat. Nonhealing facial abscesses and persistent or recurrent cellulitis are rare entities that warrant further thought and workup. In patients with inflammatory bowel disease (IBD), surgeons must be aware of neutrophilic dermatoses like pyoderma gangrenosum masquerading as infection. Surgical treatment of undiagnosed neutrophilic dermatoses may create a large nonhealing wound.

WORKUP

• Cultures of thick yellow wound drainage
  → No growth from three cultures sent for aerobic, anaerobic, & fungal
  → CT: extensive facial cellulitis involving parotid with open wound.
  → Dermatology consult: biopsy of arm nodule.

DIAGNOSIS: PYODERMA GAN GRENOSUM or SWEET’S SYNDROME IN SETTING OF ULCERATIVE COLITIS FLARE

POST-DIAGNOSIS COURSE

• Continued Antibiotics (Augmentin) for possible superinfection of open preauricular lesion. Cultures with no growth.
  → Started on high-dose pulsed steroids, initially Solu-medrol, then prednisone 60mg
  → Improved and discharged on hospital day 9.
  → Tapered off steroids over next 2-3 months
  → Wound granulated and healed.

NEU TROPHILIC DERMAT OSES: PYODERMA GAN GRENOSUM AND SWEET’S SYNDROME

Pyoderma gangrenosum
→ Ulcerative skin disease typically begins as aseptic papule, pustule, or vesicle.
→ TYPICAL (PG): Develops into painful ulcer with ragged, overhanging, dusky purple edges and surrounding induration and erythema. 80% lower extremities. <5% head and neck.
→ ATYPICAL (APG): Superficial with hemorrhagic bullae. 77% upper extremities. Associated with hematologic malignancies
→ 50% Pathergy
Sweet’s Syndrome
→ Lesions with skin trauma. Contraindication to aggressive debridement.
→ Epidemiology: Rare. Occurring most frequently in young to middle-aged adults. F>M
→ 50% systemic dz. >30% IBD (UC:Crohn’s 1:1). 20% arthritis. 27% APG heme malignancy
→ Diagnosis of exclusion.
→ Treatment: *Steroids, cyclosporine, TNF-α inhibitors (e.g. etanercept), dapsone

Sweet Syndrome
(acute febrile neutrophilic dermatoses)
→ Fevers, tender erythematous plaques or nodules occur on face, neck, extremities
→ Associated: URI/GI infections, IBD, pregnancy, hematologic malignancies
→ Dermal neutrophilic infiltrate. NO vasculitis
→ Treatment: Steroids, potassium iodide, colchicine, dapsone, chemotherapeutic agents

REFERENCES


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Figure 1. Preauricular abscess after 1st I&D by PCP.

Figure 2. Open wound after 3rd I&D & debridement by OSH PSY.

Figure 3. On admission to ORL-HNS, preauricular draining wound with surrounding erythema. Arm nodule noted.

Figure 4. After I&D at outside hospital, did not improve. Admitted to Medicine service and ORL-HNS consulted.

Figure 5. Deep dermal and periadnexal neutrophilic infiltrate. No microorganisms identified on Gram, AFB and PAS stains. Consistent with neutrophilic dermatoses.

Figure 6. Patient well-healed on most recent exam this year. Scars from each episode are visible: one in the preauricular area and one overlying the mandible.

TAKE-HOME POINTS

• Consider neutrophilic dermatoses (pyoderma gangrenosum or Sweet’s syndrome) in patients with aseptic, nonhealing, or recurrent facial abscesses;
  → ulcers; or cellulitis. Especially in patients with IBD, heme malignancies, or RA.
• If suspected, Avoid further surgical trauma. Due to PATHERGY.
• Primary treatment is steroids.

One year later
• Presented with 3 days of rapid R facial swelling and mandible.
• Again, improved on I&D & debridement by OSH PSY

One year later, patient well-healed.

Patient well-healed on most recent exam this year. Scars from each episode are visible: one in the preauricular area and one overlying the mandible.

Figure 7.