Wound Management in the Patient with Inflammatory Bowel Disease

Nancy Tomaselli, RN, MSN, CRNP, CWOCN, LNC  
President & CEO  
Premier Health Solutions, LLC  
www.PremierHealthSolutions.com

Pyoderma Granulosum

- Chronic neutrophilic inflammatory disease
- Can cause painful ulcerative lesions
- Associated with systemic diseases such as IBD (UC, regional enteritis, Crohn’s), arthritis, hematologic and immunologic abnormalities
- Pathophysiologic mechanism is unknown
**Pyoderma Granulomum**

- Extremely painful lesions
- Begin as a nodule, pustule or bullae
- Develop significant induration and erythema
- Progress to one or more chronic ulcers
- Course waxes and wanes

**Common characteristics**
- Irregular wound edges that are elevated and violaceous
- Ulcers are deep, exudative and extremely tender
- Wound base is often filled with yellow slough and/or islands of necrosis
**Pyoderma Granulosum**

- Common characteristics
  - Wound edges are undermined
  - Band of erythema may extend from the wound edge, which defines the direction the ulcer may extend
  - Healing present along one edge with enlargement along another edge

- Ulcers heal slow and leave an atrophic, irregular scar
- Common sites: lower legs, buttocks, abdomen, face, hands
- Mechanism by which PG develops is unknown
  - Pathergy (development of lesions in areas of trauma) plays a role
**Pyoderma Gangrenosum**

- Distinguishing features
  - Ragged and boggy borders
  - Elevated
  - Dusky red, purple
  - Edema halo

Copyright 2009 Premier Health Solutions, LLC
Pyoderma Granulomum

- Difficult to diagnose
  - Disease of exclusion
  - Misdiagnosed as venous, arterial, neuropathic, vasculitic, or neoplastic wounds
  - Dx based on clinical manifestations-no diagnostic test to confirm
  - H&P, skin biopsy to exclude other causes, associated illness

Pyoderma Granulomum

- Treatment: cure does not exist
  - Systemic therapy with local wound care
  - Corticosteroids: Prednisone 60-120 mg daily until reduction of pain and granulation tissue
  - Dapsone used to control wound bioburden
Pyoderma Granulomum

- Treatment: cure does not exist
  - Limited disease: topical or intralesional steroids
  - Antibiotics with anti-inflammatory agents (cyclosporine)
  - Infliximab

Pyoderma Granulomum: Topical Treatment

- Topical steroids (Orabase with Kenalog)
- Topical immunomodulators (tacrolimus & pimecrolimus)
- Nicotine patch
- Intralvesional steroids
  - Methylprednisolone
**Pyoderma Granulomum: Systemic Treatment**

- Antineoplastics
  - Chlorambucil
  - Cyclophosphamide
- Antibiotics
  - Dapsone
  - Minocycline
  - Cyclosporine
  - Clofazamine

- Anti-inflammatories
  - Mesalamine
- Antimetabolites
  - Methotrexate
- Corticosteroids
  - Prednisone
- Monoclonal antibodies
  - Infliximab

Copyright 2009 Premier Health Solutions, LLC
Pyoderma Granulosem: Systemic Treatment

- Immunomodulatory agents
  - Thalidomide
- Immunosuppressents
  - Azathioprine
  - Mycophenolate mofetil
- IV immunoglobulin
- Plasmapheresis

Pyoderma Granulosem

- Treatment
  - Topical wound management
    - Exudate management
    - Protection from trauma
    - Moist wound environment
    - Pain control
Pyoderma Granuloseum

- Treatment
  - Non-adhesive dressings d/t pain
  - Debridement through autolysis and regression of disease process itself
  - Antibacterial topical dressings warranted
  - Use caution to prevent trauma

Pyoderma Gangrenosum

- Case study
  - 52 year old female diagnosed with ulcerative colitis in 2005
  - Colonoscopy revealed disease from rectum to mid transverse colon
  - Medically managed without surgery
Pyoderma Gangrenosum

• Case study
  • Medications
    • Managed with Predisone until 2006
    • Began Mesalamine in 2007
    • Currently on Infliximab

Pyoderma Gangrenosum

• Case study
  • Hit leg on coffee table in October 2007
  • Treated in ED with antibiotics and wound did not heal
  • Admitted to hospital 2 months later
  • Diagnosed as venous ulcer
  • Treated with Unna boot and compression increased pathergy
Pyoderma Gangrenosum

- PG

Venous Ulcer

Case study
- Admitted to University of Chicago in February of 2008
  - Biopsy of wound performed
  - Started on Infliximab and lesions improved
  - Treatment for wounds started in February 2008 and wounds were healed in March of 2008
Pyoderma Gangrenosum

• Case study
  • Topical treatment included
    • Alginate
    • Alginate with silver
    • Hydrogel

February 2008: Week 1
Moist Wound Healing

Pyoderma Gangrenosum

Copyright 2009 Premier Health Solutions, LLC
Pyoderma Gangrenosum
February 2008: Week 1

Pyoderma Gangrenosum
February 2008: Week 2
Pyoderma Gangrenosum
February 2008: Week 3

Copyright 2009 Premier Health Solutions, LLC

Pyoderma Gangrenosum
February 2008: Week 4

Copyright 2009 Premier Health Solutions, LLC
Pyoderma Gangrenosum
March 2008: Week 1

Copyright 2009 Premier Health Solutions, LLC

Pyoderma Gangrenosum
March 2008: Week 2

Copyright 2009 Premier Health Solutions, LLC
Pyoderma Gangrenosum
March 2008: Week 2

Hydrogel Dressing
References


