Pilonidal Disease
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Pathophysiology and Presentation

Also Called “Pilonidal Cyst”, “Sacroccygeal Pilonidal Sinus Disease” (SPSD), “Jeep Seat”, or “Jeep Disease” (Due to Prevalence in Drivers During World War 2)

Definition
- Inflammatory Condition of the Skin and Subcutaneous Tissue of the Gluteal Cleft
- “Pilonidal Cyst” is a Misnomer – No Epithelial Lining (Not a True Cyst)

Pathophysiology
- Exact Mechanism is Not Clear
- An Acquired Collection of Hair and Skin Debris within a Pore or Pit (Previously Believed to be Due to a Congenital Abnormality)

Risk Factors
- Young Adults (Teens-20’s)
- Male Sex
- Caucasian
- Obesity
- Deep Gluteal Cleft – Facilitates Hair Entrapment
- Hirsute Body (Thick/Stiff Body Hairy)
- Prolonged Sitting (> 6 Hours)
- Local Trauma

Pilonidal Cyst
Presentations 5-7

- **Acute Presentation:** Acute Cellulitis or Abscess
  - Sudden Onset Intergluteal Pain and Swelling
  - Mucous or Purulent Drainage
  - Fever
- **Chronic Presentation:** Chronic Smoldering Disease
  - Recurrent or Persistent Pain and Drainage
  - One or More Pits/Sinus Tracts
  - May See Shed Hair Protruding from Pits
  - Can Develop Squamous Cell Carcinoma in Long Standing Untreated Disease 8

## Diagnosis

### Diagnosis

- Clinical Diagnosis Based on History and Physical Exam
- May Consider MRI if Osteomyelitis is Suspected
- May Consider Biopsy if Concerned for Malignancy with an Atypical or Aggressive Appearance

### Classification Systems

- Multiple Classification Systems Have Been Described but None Have Been Universally Accepted 10
- **Tezel Classification** 11
  - Type I: Asymptomatic Sinus
  - Type II: Acute Abscess
  - Type III: Chronic Symptomatic Disease, Limited to the Navicular Area
  - Type IV: Chronic Symptomatic Disease, Extending Beyond the Navicular Area
  - Type V: Recurrent Disease
- **Guner Classification** 12
  - Stage I: Single Pit in the Midline
  - Stage II: Multiple Pits in the Midline
    - IIa: 2-3 Pits
    - IIb: > 3 Pits
  - Stage III: Midline Pits with Lateral Extension in One Direction
  - Stage IV: Midline Pits with Lateral Extension in Both Directions
  - (Stage R: Recurrent PSD Following Any Treatment)
- **Other Classification Systems:**
  - Chavoin Classification 13
  - Doll Classification 14
  - Irkorucu Classification 15
  - Karkas Classification 16
  - Lapsekili Classification 17
  - Awad Classification 18
Treatment

Acute Disease

- **Cellulitis**: Antibiotics
- **Abscess**: Incision and Drainage (I&D)
  - Incision Made **Lateral to the Cleft** Off Midline – Improved Healing
  - Sinus Curettage or Tract Excision in Acute Disease is Not Successful 19,20
  - Include Antibiotic Treatment if Diabetic, Immunocompromised, or Other Signs of Systemic Infection
  - 60% Chance of Successful Healing 21

Chronic Disease

- Primary Management of Chronic Disease is by Surgical Excision 5,20
  - Techniques:
    - Complete Midline Excision of Pit and Sinus Tracts
    - Tract Unroofing and Debridement without Pit Excision
    - Pit Picking (Bascom’s Operation/Bascom I) – Pits are Excised Using 2-4 mm Biopsy Punches and then Trapped Hair Follicles are Removed Using Fine Clamps
      - Smallest Intervention with Minimal Scarring
    - Video-Assisted Sinus Ablation – An Evolving Minimally Invasive Approach 22
  - Preferred Technique is Debated
  - Preserve as Much Healthy Tissue as Possible
- Nonoperative Managements: 20,23
  - **Meticulous Hair Control** (Shaving, Laser Hair Removal, or Topical Depilatory Creams)
  - Perineal Hygiene

Wound Closure After Surgical Excision 24

- **Primary Wound Closure**
  - Approaches: Midline or Off-Midline
  - Faster Healing (14.5 Days) and Return to Work (11.9 Days)
  - **Higher Recurrence** Rates (8.7%)
- **Delayed Wound Closure/Secondary Intention**
  - Approaches:
    - **Left Open**
    - **Marsupialization** – Suture Skin Margins to Presacral Fascia at the Edges
    - **Negative Pressure Wound Therapy (NPWT)**
  - **Longer Healing** (60.4 Days) and Return to Work (17.5 Days)
  - Lower Recurrence Rates (5.3%)


- **Flap Closure**
  - Approaches:
    - Rhomboid Flaps (Limberg, Dufourmentel, or Webster)
    - Karydakis Flap
    - Bascom’s Cleft Lip Procedure (Bascom II)
    - V-Y Advancement Flap
    - Z-Plasty
  - Generally Reserved for Extensive Disease
  - Decreases Tension to Facilitate Closure

References

9. Gigs Hammouri. Wikimedia Commons. (License: CC BY 3.0)


