2018

Dynamic Practice Guidelines for Emergency General Surgery

Committee on Acute Care Surgery, Canadian Association of General Surgeons

18

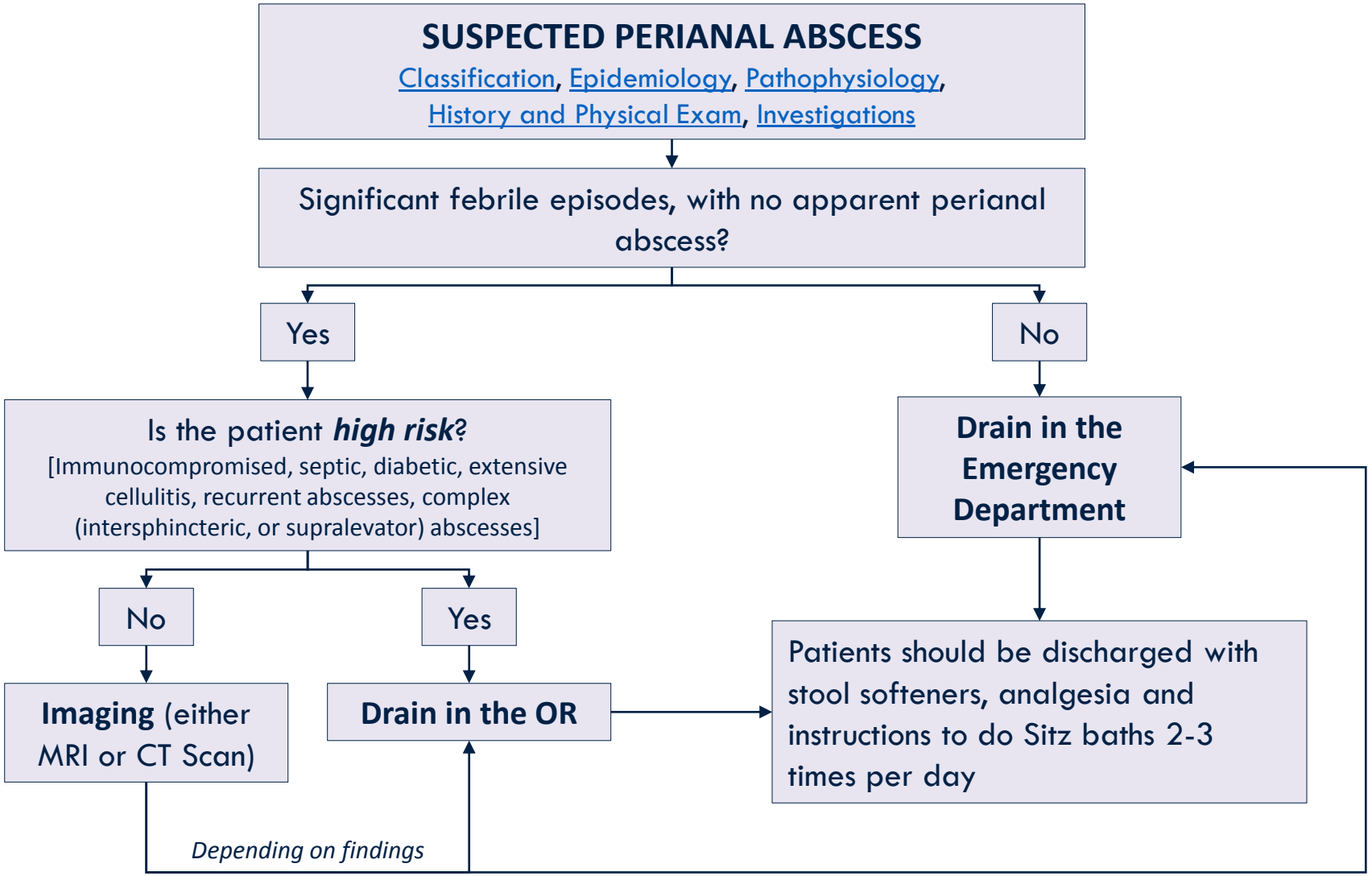
PERIANAL ABSCESS

Dynamic Practice Guidelines for Emergency General Surgery

Allison Hunter MD
Committee on Acute Care Surgery, Canadian Association of General Surgeons

Clinical Practice Guideline

PERIANAL ABSCESSES



PERIANAL ABSCESSES

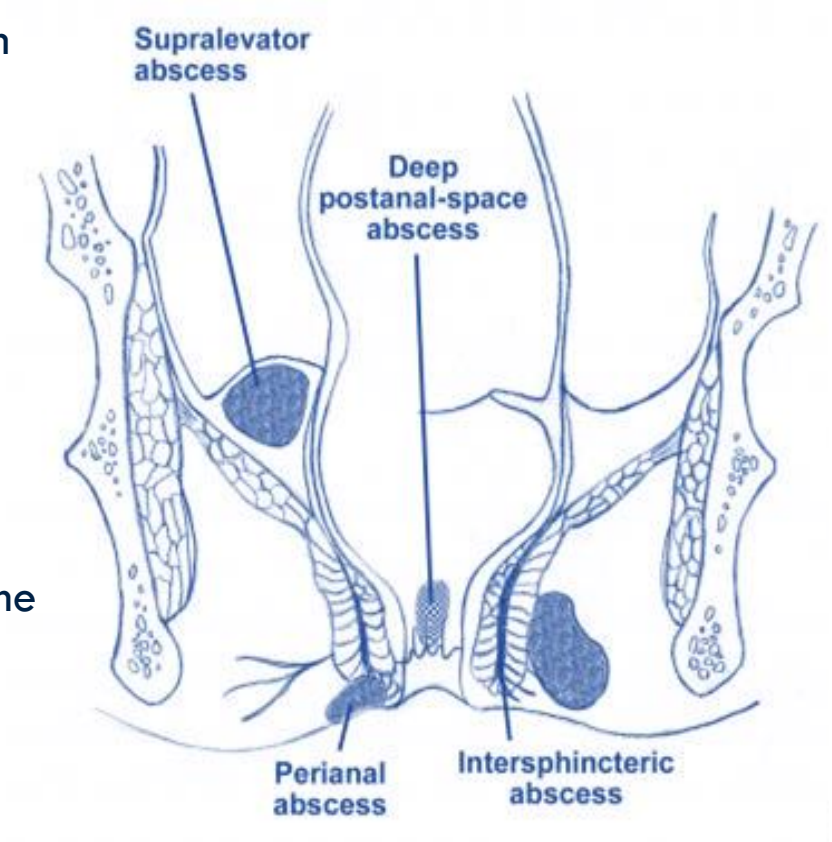
Return to CPG

Definition/ Classification

Perianal abscesses are classified based on their anatomic location as:

1. Perianal (Simple)
2. Ischiorectal
3. Intersphincteric
4. Supralevator

- Perianal abscesses occur immediately adjacent to the anal verge.
- Abscesses that travel the path of least resistance to the other spaces such as the intersphincteric, ischiorectal, or supralevator spaces form perirectal abscesses.



Cameron JL, Cameron AM. The Management of Anorectal Abscess and Fistula. 2017. Current Surgical Therapy

PERIANAL ABSCESSES

Return to Classification

Simple Perianal Abscess

- A simple anorectal abscess
- Occur immediately adjacent to the anal verge.
- Presentation is often severe, constant pain in the anal or rectal area.
- Constitutional symptoms such as fever and malaise are common.
- Purulent rectal drainage may be noted if the abscess has begun to drain spontaneous.
- Undrained anorectal abscesses can expand into adjacent spaces and progress to generalized systemic infection.
- 50% of anorectal abscess will develop in to anorectal fistula

Cameron JL, Cameron AM. The Management of Anorectal Abscess and Fistula. 2017. Current Surgical Therapy

Ischiorectal Abscess

- Ischiorectal abscesses are larger, more complex.
- Penetrates through the external anal sphincter into the ischiorectal space
- Present as a diffuse, tender, indurated, and fluctuant area within the buttocks.

PERIANAL ABSCESSES

Return to Classification

Intersphincteric Abscess

- Rare and account for only 2 to 5 percent of all anorectal abscesses
- They are located in the intersphincteric groove between the internal and external sphincters.
- They often do not cause perianal skin changes and may be no external manifestations
- Can be palpated during digital rectal examination as a fluctuant mass protruding into the lumen

Cameron JL, Cameron AM. The Management of Anorectal Abscess and Fistula. 2017. Current Surgical Therapy

PERIANAL ABSCESSES

Return to Classification

Supralevator Abscess

- Rare
- Caused by cryptoglandular infection that travels superiorly within the intersphincteric plane to the supralevator space
- Supralevator abscesses can also be caused by an inflammatory pelvic process such as Crohn disease or colonic perforation from diverticular disease or cancer.
- Potential source of pelvic infection best determined from patient history.
- Patients typically present with severe perianal pain, fever, and sometimes urinary retention.
- Physical examination usually reveals no obvious external findings.
- On digital examination, an area of induration or fluctuation can often be felt above the level of the anorectal ring, however, there may be no external manifestations seen on physical exam
- , CT scan may be required due to lack of physical findings

Cameron JL, Cameron AM. The Management of Anorectal Abscess and Fistula. 2017. Current Surgical Therapy

PERIANAL ABSCESSES

Return to CPG

Epidemiology:

- Perianal abscesses are the most common type, and are simple anorectal abscesses.
- Perianal and intersphincteric abscesses together account for >90% of all perianal infections
- Mean age of presentation is 40 years
- Ratio of Male: Female patients affected by perianal abscesses = 2:1
- Anorectal abscesses develop in approximately one-half of patients with perianal Crohn disease

Cameron JL, Cameron AM. The Management of Anorectal Abscess and Fistula. 2017. Current Surgical Therapy

PERIANAL ABSCESSES

Return to CPG

Pathophysiology:

1 Infection originates from an obstructed anal crypt gland. Anal crypt glands are arranged within the anal canal at the level of the dentate line. The glands penetrate the internal sphincter and end in the intersphincteric plane.

2 When the gland becomes obstructed with inspissated debris, bacterial growth occurs, with resultant abscess formation.

3 Perianal abscesses occur immediately adjacent to the anal verge. Ischiorectal abscesses are larger, more complex and usually present as a tender buttock mass.

4 Supralevator and intersphincteric abscesses are rare and there may be no external manifestations. A tender mass on digital rectal exam above the anatomic anal canal, or within the canal is clinically suggestive.

5 Undrained anorectal abscesses can expand into adjacent spaces and progress to generalized systemic infection

6 50% of anorectal abscess will develop in to anorectal fistula

Cameron JL, Cameron AM. The Management of Anorectal Abscess and Fistula. 2017. Current Surgical Therapy

PERIANAL ABSCESSES

Return to CPG

History:

- Severe, constant anal or rectal pain, and/ or swelling
- Fever and malaise
- Fluctuant or indurated perianal skin
- Leakage of mucus and pus related to spontaneous drainage

Physical Examination:

- Palpable fluctuant mass on digital rectal examination
  - If a patient has an intersphincteric or supralevator anorectal abscess, these findings may not be present

Cameron JL, Cameron AM. The Management of Anorectal Abscess and Fistula. 2017. Current Surgical Therapy

PERIANAL ABSCESSES

Return to CPG

Investigations:

- Usually laboratory investigations yield little information; however, frequently patients will have an elevated white blood cell (WBC) count.

Imaging Studies:

- US is usually not tolerated for patients with acute abscesses.
- CT scan with IV or rectal contrast can differentiate perianal cellulitis from abscess or when deep anorectal abscess is suspected, but cannot be palpated on digital rectal exam.
- MRI is the most useful imaging tool especially when evaluating potential fistula-in-ano cases, suspected perianal Crohn Disease, or recurrent/ complex abscesses.

Cameron JL, Cameron AM. The Management of Anorectal Abscess and Fistula. 2017. Current Surgical Therapy

PERIANAL ABSCESSES

Return to CPG

Operative Management

In the Emergency Department

- Create generous incision over fluctuant area, as close to anal canal as possible.
- Break down loculated tissue with blunt instrument
- Packing is not required
- Antibiotics are not required
- Cultures are not required

Patients should be discharged post procedure with:

- Stool softeners
- Analgesia
- Sitz baths 2-3 times per day

Cameron JL, Cameron AM. The Management of Anorectal Abscess and Fistula. 2017. Current Surgical Therapy

PERIANAL ABSCESSES

Return to CPG

Operative Management

In the Operating Room

Patients with the below presentation and co-morbidities should be taken to the operating room for examination under anesthesia (EUA):

- Recurrent abscesses
- Complex abscesses (intersphincteric and supralevator)
- Immunocompromised patients
- Diabetic patients
- Extensive cellulitis
- Sepsis or patients with a septic clinical picture

BEWARE OF FOURNIER'S GANGRENE IN THESE PATIENTS

Patients should be discharged post procedure with:

- Stool softeners
- Analgesia
- Sitz baths 2-3 times per day

Cameron JL, Cameron AM. The Management of Anorectal Abscess and Fistula. 2017. Current Surgical Therapy