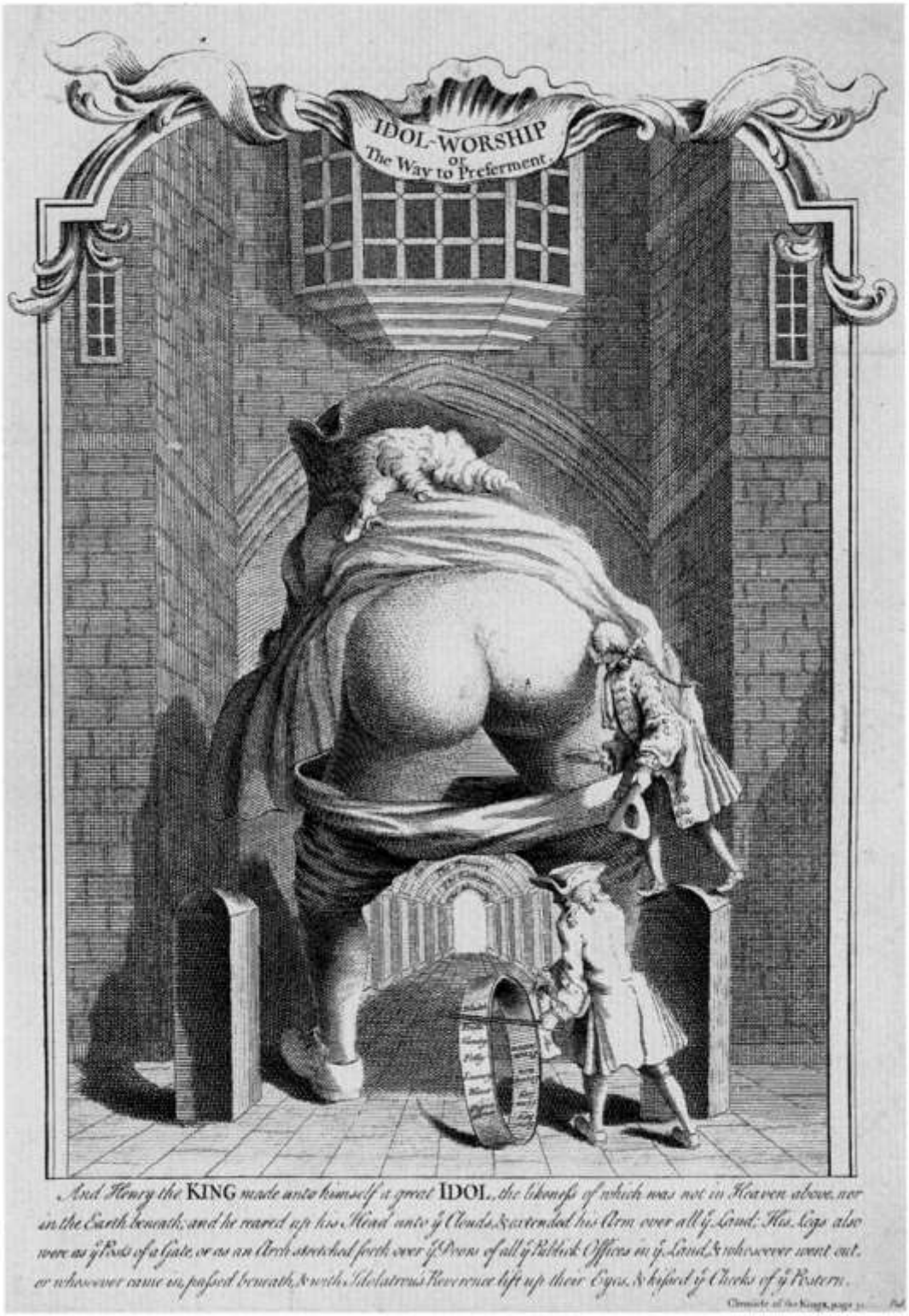
THE NORTHERN HOSPITAL

ANORECTAL ABSCESS



"Idol Worship or The Way to Preferment", print, 1740 artist unknown, possibly after William Hogarth, British Museum.

"And Henry the King made unto himself a great IDOL, the likes of which was not in Heaven above, nor in the Earth beneath; and he reared up his head into ye clouds & extended his Arm over all ye Land; His Legs also were as ye Posts of a Gate, or an Arch stretched forth over ye Doors of all ye Publick Offices in ye Land, & whosoever went out, or whosoever came in passed beneath & with Idolatrous Reverence lift up their Eyes, & kissed ye cheeks of ye Postern".

Chronicle of the Kings

"...An engraving, showing an entrance gateway, the road of which is stopped by a Colossus (Sir Robert Walpole) standing with his back to the spectator, bending down, and exposing his naked posteriors. Between his legs is seen a long arcade leading to St James's Place, The Treasury, The Exchequer, The Admiralty.

Between the legs of the giant a courtier is driving a hoop, inscribed, "Wealth Pride Vanity Folly Luxury Want Dependence Servility Venality Corruption Prostitution". In his hand he carries a "Petition for", i.e. for anything. Such, it is intimated, is the courtier's object, and the course he pursues to obtain it. Another courtier has raised himself on a post in order that he may salute Sir Robert's posteriors".

From the description in the Catalogue of Prints and Drawings
in the British Museum, Division I,
Political and Personal Satires, dated 1740.

Sir Robert Walpole, was the first Prime Minister of Great Britain, and he maintained this office for an incredible - and unbroken to this day - record of 21 years. Being in such a position of supreme authority for such a prolonged period of time naturally meant he accumulated many personal enemies over his long tenure, amoung them some powerful figures, including William Pitt the Elder who would himself become Prime Minister. Perhaps most unfortunately however it was the irreverent British cartoon satirists who in the Eighteenth century were supreme masters of their art, who did him the most damage in the eyes of the wider general public - the anonymous etching "Idol Worship or The Way to Preferment" of 1740 being a particularly irreverent example! Sir Robert bestrode the political stage of the age like a colossus - as the Idol image suggests - and anyone wishing to progress their career or cause simply had to have his ear (..or perhaps another part of his anatomy it seems). Sir Robert of course had no difficulty in identifying the cause of his discomfiture in the parliament, William Pitt being a case in point - but outside of the parliament much to his irritation, this cause was not so clearly identifiable. A number of artists have been suggested for the anonymous etching of the "Idol", but it certainly has the strong imprint of a certain Mr. William Hogarth!

When we assess our patients with anorectal complaints we need keep in mind the vision of Sir Robert, the colossus! The culprit of the problem will be quite visible in some instances such as, the perianal or the ischiorectal abscess - yet in others it will not be so readily visible - if at all - the most secretly seditious of these being the supralevator and the intersphincteric abscesses!

ANORECTAL ABSCESS

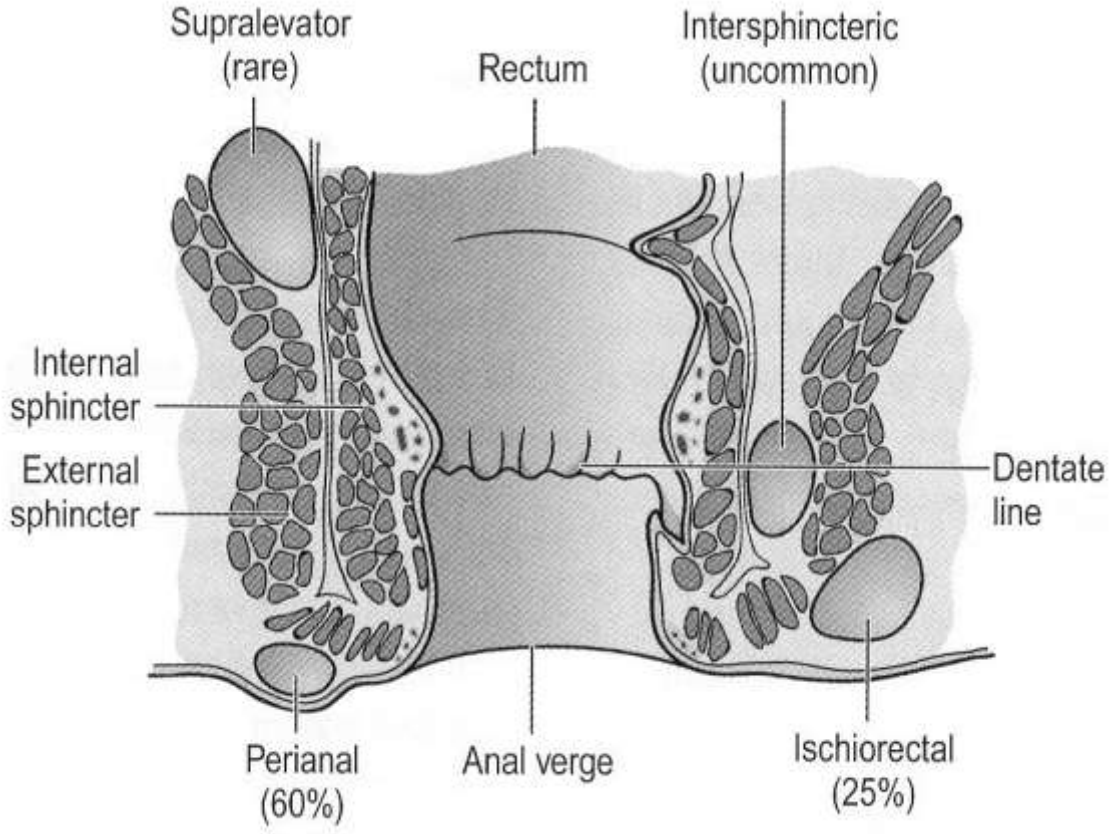


Diagram showing the 4 principle locations of perianal abscess. [1]

Introduction

Anorectal abscesses are common and present with moderate to severe perianal pain.

Infection tends to spread along local facial spaces into 4 potential anorectal spaces and in consequence four principle types are recognised:

1. **Perianal abscess.**
2. **Ischiorectal abscess.**
3. **Supralevator abscess.**
4. **Intersphincteric (or submucous) abscess.**

Perianal and ischiorectal abscesses are usually readily detectable on inspection.

However the more deep seated supralevator and intersphincteric abscesses are not, readily detectable on inspection and their presence may be inferred by the patient's symptoms of severe and intractable perianal pain.

These patients symptoms should be not ignored. Referral should be made for surgical opinion and examination under anaesthesia

The treatment of all anorectal abscesses is surgical drainage.

Treatment of anorectal fistulae is complex, and requires referral to an anorectal surgeon.

Pathology

Causes:

These include:

1. Infection of perianal glands:
    - The underlying cause of *most* anorectal abscesses is an infection of one of the anal glands that drain into the anal canal at the level of the dentate line.

Other less common causes can include:

2. Complications of inflammatory bowel disease.
3. Local trauma
4. Malignancy
6. Radiation damage
7. Immunosuppression in general

Organisms:

The infection is often **polymicrobial**, involving aerobic and anaerobic bowel flora. [2]

Complications:

These include:

1. Generalized bacteremia/ septicaemia
2. Perianal fistula formation:
    - Anal fistulas communicate between the anorectum and the perianal skin.
    - These generally arise from a pre-existing abscess or there is a history of recurrent abscesses.
    - Fistulous tracts may be single or multiple.

- They can be intimately related to the perianal sphincters and so may impair continence.

They are assonated in particular with:

- Recurrent suppuration
- Malignancy

Clinical features

Perianal and ischiorectal abscesses are usually readily detectable on inspection, however the more deep seated supralevator and intersphincteric abscesses are not, and their presences may be inferred by the patient's symptoms of severe and intractable perianal pain.

The diagnosis of **fistulous complications** is particularly suspected on a history of recurrent perianal suppuration and is confirmed by the delineation of fistulous tracts during surgery under anaesthesia.

Perianal abscess.

Features include:

1. Painful inflamed indurated mass at the anal margin.
2. Usually just lateral and posterior to the anus.
3. Systemic symptoms are uncommon.

Ischiorectal abscess.

Features include:

1. Tend to be larger / more extensive than perianal abscesses.
2. However they present with less obvious cutaneous findings as they are more deeply set than perianal abscesses.

   They also lie within more compressible ischiorectal fat
3. Patients tend to be more systemically unwell (compared to cases of perianal abscesses).
4. The region of observable induration lies more lateral than the situation of perianal abscess.
5. Abscess "pointing" tends to occur late and more commonly a deceptive appearance of cellulitis is seen, belying the underlying abscess.

Supralevator abscess.

Features include:

1. These are situated *above the levator ani muscle* and so in reality are really a pelvic abscess.

2. There may be very little/ or no superficial signs of this deep seated abscess.

    - Perianal examination may be normal, but rectal examination may reveal a firm tender mass.

3. Severe and unrelenting, deep seated perianal pain is a feature.

4. Patients may present with painful defecation and altered bowel habit.

5. These abscesses are often secondary to significant intraabdominal pathology, including:

    - Diverticular disease.

    - Crohn's disease

6. Systemic symptoms are common, and this condition may present simply as a PUO.

Intersphincteric (or submucous) abscess.

Features include:

1. Again severe and unrelenting perianal pain may be the only clue to diagnosis, as superficial signs may be minimal or non-existent.

2. There may be associated false localizing urinary symptoms.

3. When these abscesses rupture, they do so within the anal canal.

Investigations

None may be necessary for uncomplicated perianal infections

Investigation is directed at possibly underlying pathology and/ or secondary complications

The following are considered:

1. Blood tests:

- FBE
- CRP
- U&Es/ glucose
- Blood cultures, if systemically unwell.

2. Swab for microscopy and culture of any discharged purulent material.

Management

1. Analgesia:

   - Oral opioids should be avoided, however in severe cases titrated IV opioid will be required.

2. Laxatives:

   - These may help alleviate the symptoms of painful bowel actions.

3. Antibiotics:

   - There is no role for antibiotic treatment *alone* in perianal abscesses
   - Antibiotic treatment is usually only an *adjunct* to surgery.
   - They may be given for patients with severe disease / systemic systems, but they do not remove the need for surgical drainage.
   - For **severe** disease/ systemic illness, combination of ceftriaxone, ampicillin and metronidazole may be used. [2]

4. Surgery:

   - **The treatment of all anorectal abscesses is surgical drainage, ideally by a surgeon with specific colorectal expertise.**
   - *Some* superficial **perianal** abscesses may be suitable to drainage in the ED
   - All **ischiorectal, supralevator** and **intersphincteric** abscesses will require formal surgical exploration and drainage under GA in theatre.
   - Traditionally, in acute perianal abscesses, the search for a fistulous internal opening followed by fistulotomy has been the standard treatment.

     Although fistulae are often present, *immediate* management of associated fistulous tracts may result in higher rates of further fistulae and incontinence.

Unnecessary treatment of fistulae that will resolve spontaneously should therefore be avoided in the first instance.

- Drained abscesses will usually require drain tubes.
- Aggressive cavity probing should be avoided as this may lead to iatrogenic fistulae.
- Sitz baths and regular follow-up is then required, until full healing.

References

1. Augello M.R. Perianal Conditions, in Textbook of Adult Emergency Medicine 4th ed Cameron et al. Churchill Livingston - Elsevier, 2015.

2. eTG - March 2015

Dr J. Hayes
July 2015.