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# **ANORECTAL ABSCESSSES**

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- ✘ Acute sepsis in the region of the anus is common.
  - ✘ anorectal sepsis is more common in men than women,
  - ✘ The cryptoglandular theory of intersphincteric anal gland infection holds that, upon infection of a gland, pus, which travels along the path of least resistance

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✘, may spread caudally to present as a perianal abscess, laterally across the external sphincter to form an ischiorectal abscess or, rarely, superiorly above the anorectal junction to form a supralelevator intermuscular or pararectal abscess

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- ✘ Sepsis unrelated to anal gland infection may occur at the same or at other sites (including submucosal abscess (following haemorrhoidal sclerotherapy, which usually resolve spontaneously), mucocutaneous or marginal abscess (infected haematoma),

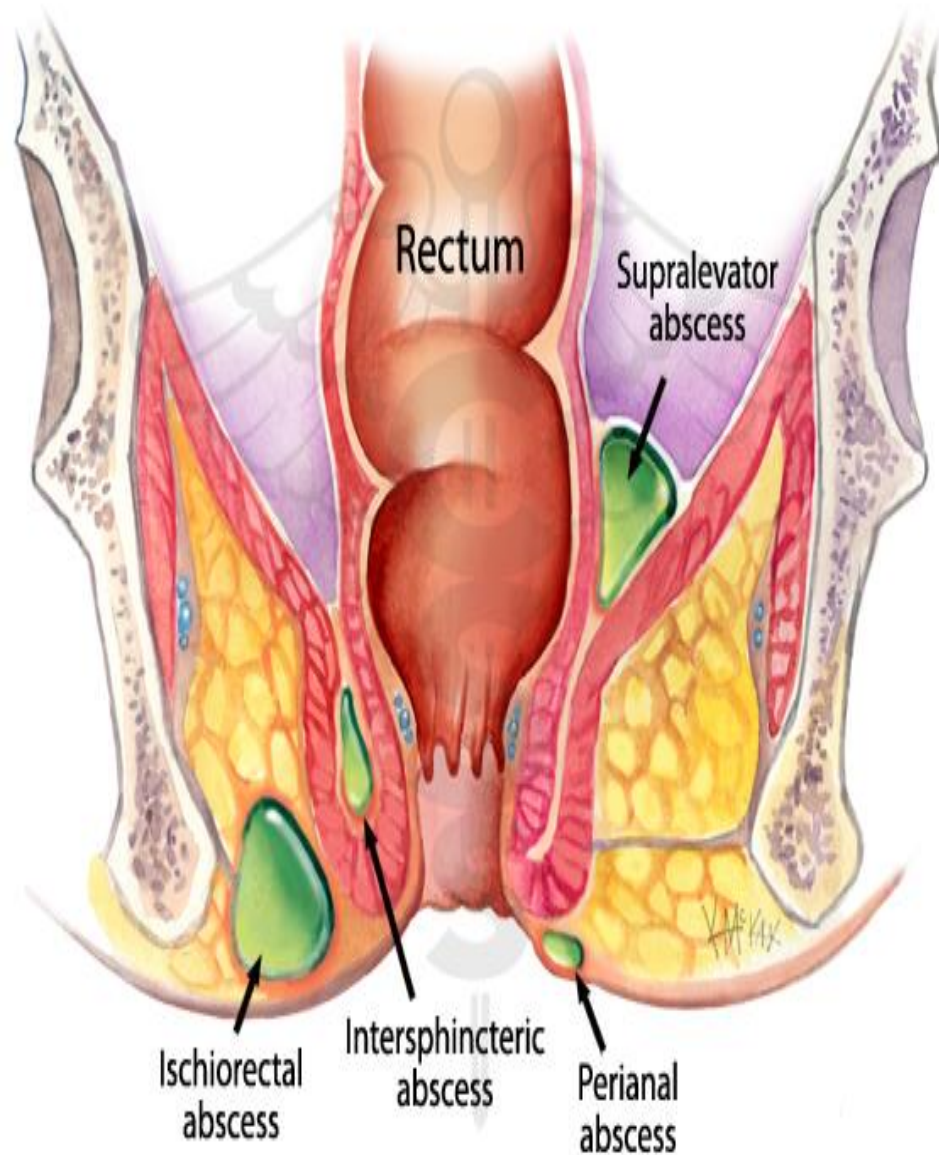
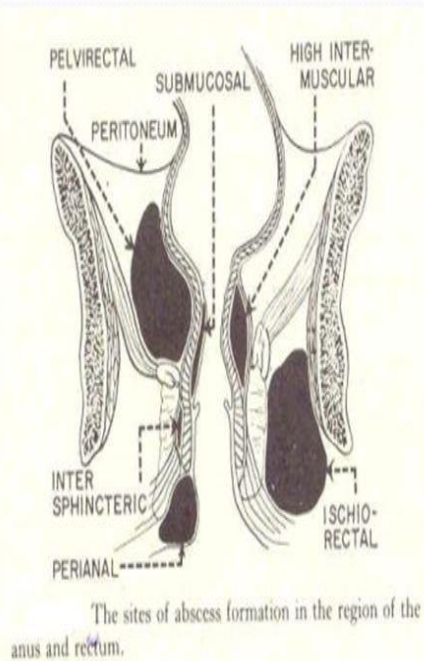


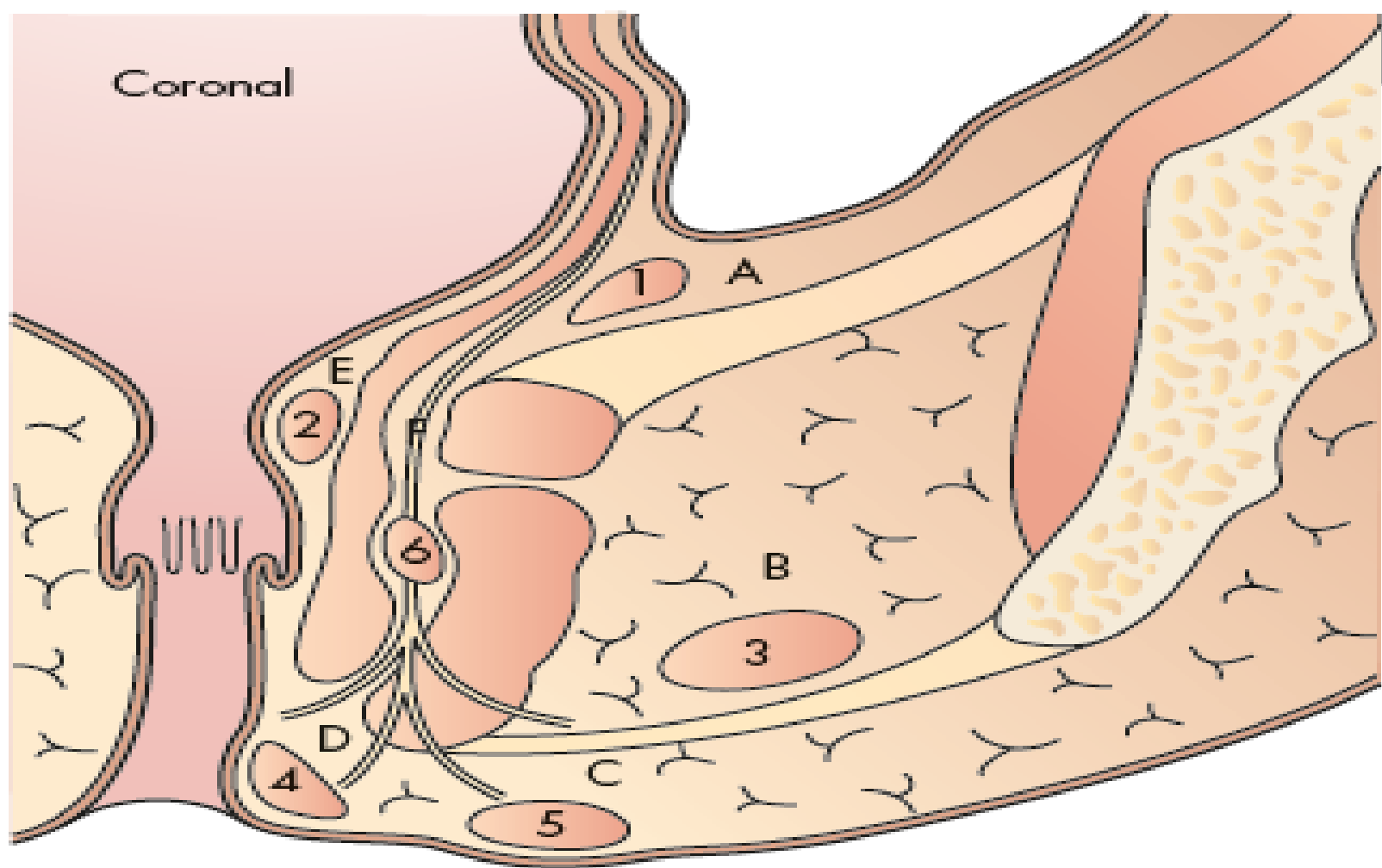
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✘ ischioirectal abscess (foreign body, trauma, deep skin-related infection) and pelvirectal supralelevator sepsis originating in pelvic disease.

# Classification of anal abscesses:

- Perianal (60%)
- Ischiorectal (20%)
- Intersphincteric (5%)
- Supralelevator (pelvirectal) (4%) (is very difficult to diagnose clinically and is very rare and caused by inflammation or a disease in the pelvis)
- Submucosal (1%)





**Figure 73.38** Diagram showing the spaces in relation to the anus and types of anorectal abscess in coronal section: A, pelvirectal supralelevator space; B, ischiorectal space; C, perianal or superficial ischiorectal space; D, marginal or mucocutaneous space; E, submucous space; F, anorectal intermuscular (intersphincteric) space; 1, pelvirectal supralelevator abscess; 2, submucous abscess; 3, ischiorectal abscess; 4, marginal abscess; 5, perianal abscess; 6, intersphincteric abscess. Reproduced with permission from Nicholls RJ, Dezeir BP. *Surgery of the*

# PRESENTATION

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- ✘ usually associated with a short (2–3 day) history of increasingly severe, well-localised pain and a palpable tender lump at the anal margin.
- ✘ Examination reveals an indurated hot tender perianal swelling.
- ✘ constitutional upset and fever



# MANAGEMENT

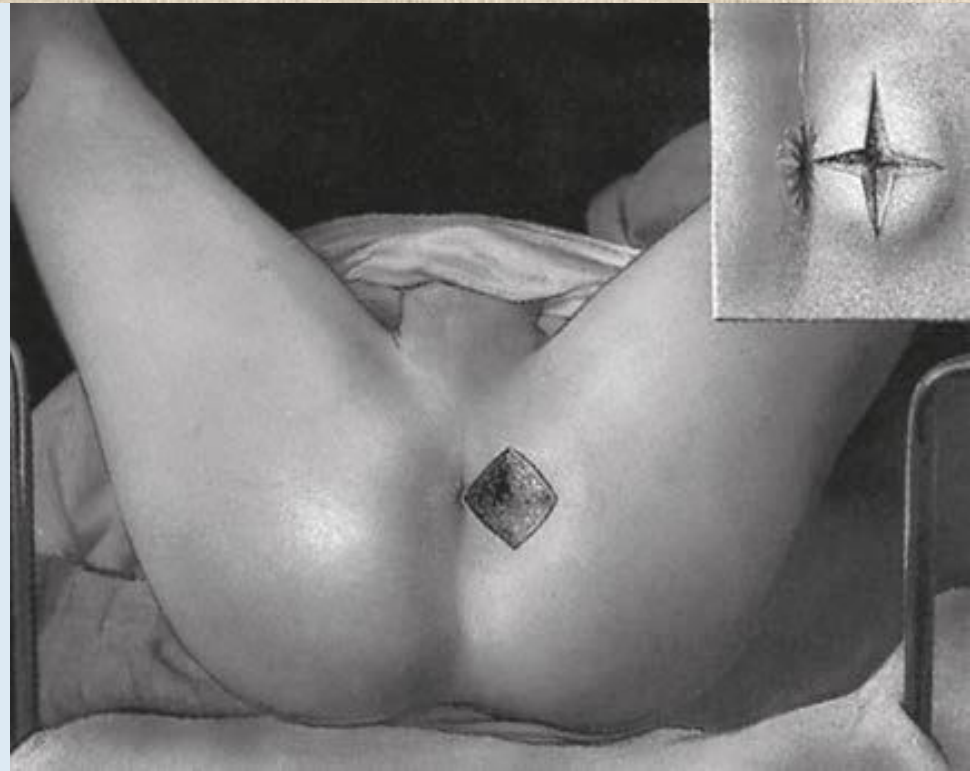
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- ✘ Management of acute anorectal sepsis is primarily surgical, including careful examination under anaesthesia, sigmoidoscopy and proctoscopy, and adequate drainage of the pus

**INCISION OF AN ISCHIORECTAL ABSCESS. THE CAVITY IS EXPLORED AND, IF SEPTA EXIST, THEY SHOULD BE BROKEN DOWN GENTLY WITH A FINGER AND THE NECROTIC TISSUE LINING THE WALLS OF THE ABSCESS REMOVED BY TH FINGER WRAPPED IN GAUZE. IT IS WISE TO BIOPSY THE WALL AND SEND THE PUS FOR CULTURE.**

### Anorectal abscess

- Usually produces a painful, throbbing swelling in the anal region. The patient often has swinging pyrexia
- Subdivided according to anatomical site into perianal, ischiorectal, submucous and pelvirectal
- Underlying conditions include fistula-in-ano (most common), Crohn's disease, diabetes, immunosuppression
- Treatment is drainage of pus in first instance, together with appropriate antibiotics
- Always look for a potential underlying problem



# FISTULA-IN-ANO

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- ✘ A fistula-in-ano, or anal fistula, is a chronic abnormal communication, usually lined to some degree by granulation tissue, which runs outwards from the anorectal lumen (the internal opening) to an external opening on the skin of the perineum or buttock
- ✘ Anal fistulae may be found in association with specific conditions, such as Crohn's disease,
- ✘ However, the majority are termed non-specific, idiopathic or cryptoglandular, and intersphincteric anal gland infection is deemed central to them.



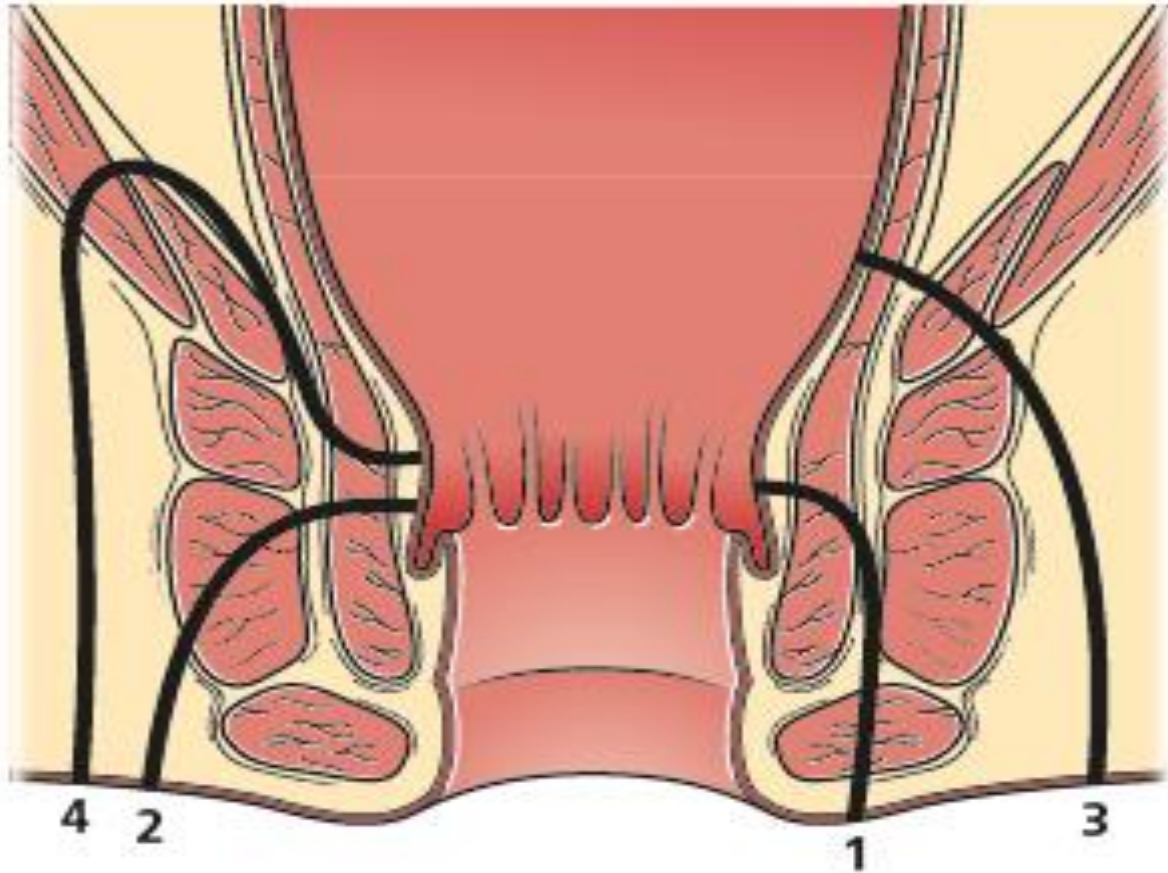
# PRESENTATION

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- × more common in men than women
- × The overall incidence is about nine cases per 100000 population per year
- × those in their third, fourth and fifth decades of life are most commonly affected.
- × Patients usually complain of intermittent purulent discharge, pain (which increases until temporary relief occurs when the pus discharges).



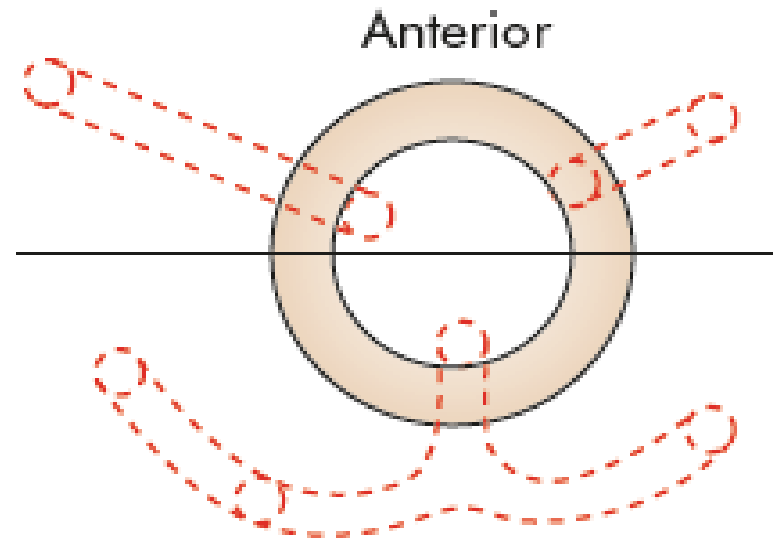
# CLASSIFICATION



**Figure 73.40** Types of anal fistula (Parks' classification): 1, intersphincteric; 2, trans-sphincteric; 3, suprasphincteric; and 4, extrasphincteric primary tracks.

## × Goodsall's rule

- × used to indicate the likely position of the internal opening according to the position of the external opening(s), is helpful but not infallible. The site of the internal opening may be felt



Goodsall's rule.

# SPECIAL INVESTIGATIONS

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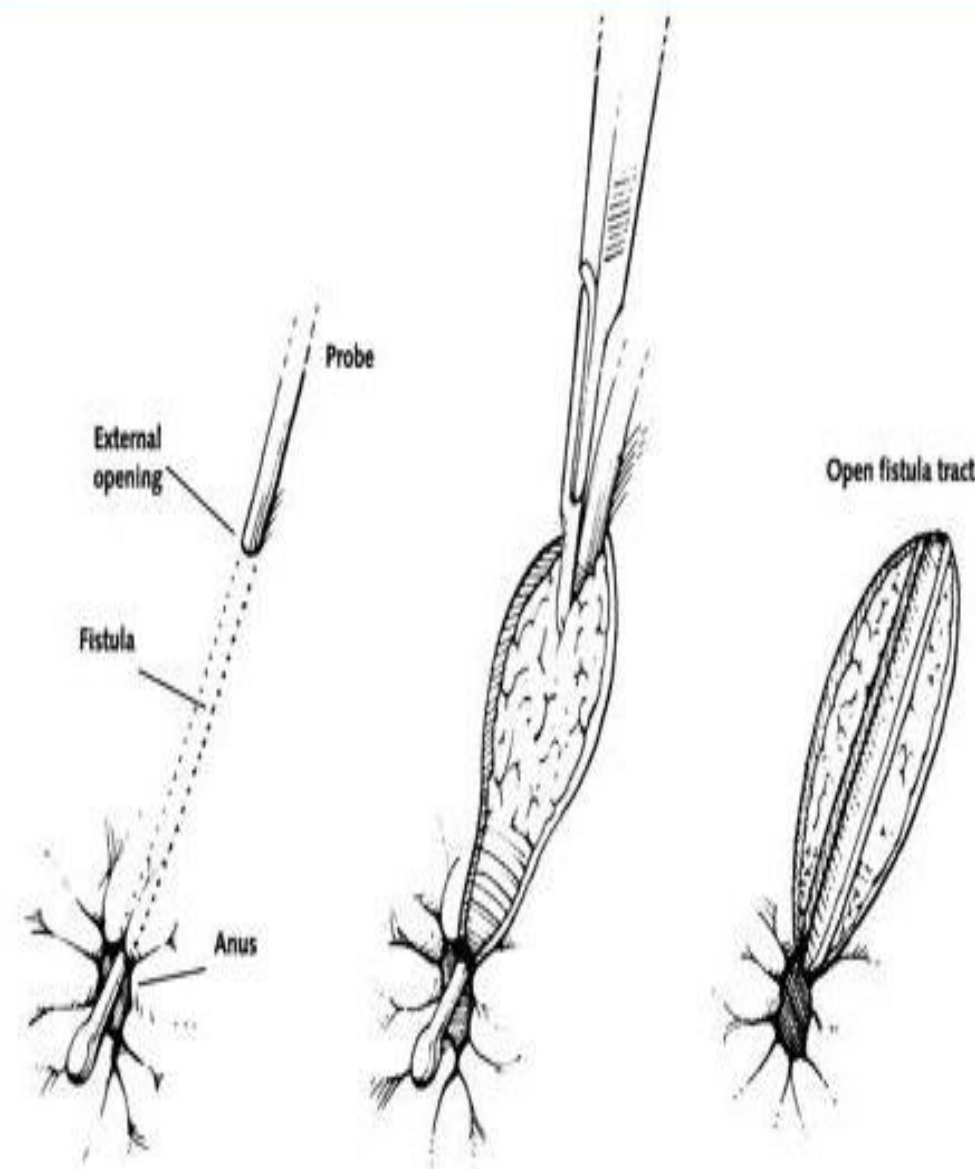
- × endoanal ultrasound
- × Fistulagram
- × Magnetic resonance imaging (MRI) is acknowledged to be the 'gold standard' for fistula imaging, but it is limited by availability and cost and is usually reserved for difficult recurrent cases.
- × computed tomography (CT)

# SURGICAL MANAGEMENT

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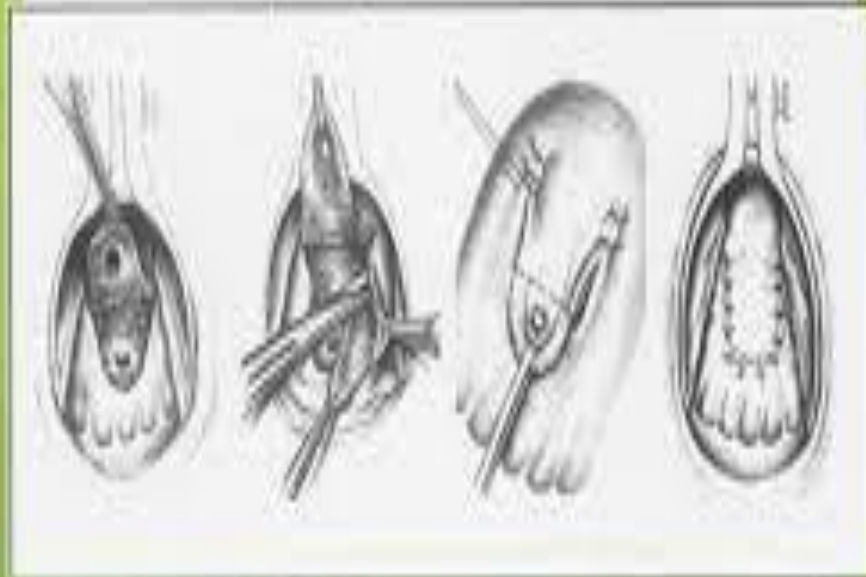
- × *Fistulotomy* That the fistulous track must be laid open
- × *Fistulectomy* This technique involves coring out of the fistula
- × seton
- × **Advancement flaps**
- × **Biological agents** agents that essentially plug and seal the track and allow ingrowth of healthy tissue to replace it

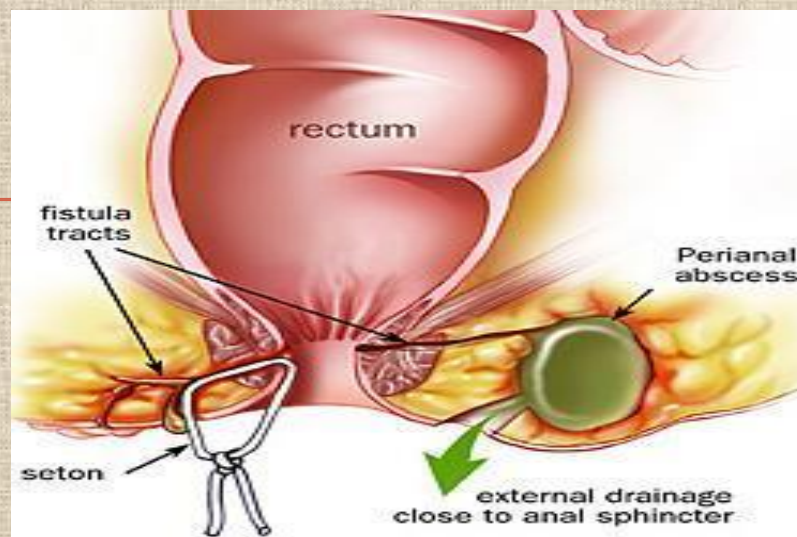




## Advancement Flap + core out fistulectomy

- Sphincter-sparing method
- Pre-op bowel prep and antibiotics cover
- Internal opening must be identified





## Seton

### Loose seton

- Achieve drainage of the fistula track
- Allow any secondary track to heal
- As part of staged fistulotomy



## Seton

### Tight (cutting) seton

- Commonly used in high transphincteric fistula
- Divide the muscle slowly to produce a gradual fistulotomy



# ANAL INTRAEPITHELIAL NEOPLASIA

- ✘ is a multifocal virally induced dysplasia of the perianal or intra-anal epidermis which is associated with the human papilloma virus
- ✘ A high index of suspicion and targeted biopsy yields the diagnosis, whereas multiple (mapping) biopsies give an indication of the extent and overall severity of the disease.



# EXTENSIVE ANAL INTRAEPITHELIAL NEOPLASIA (AIN), WHICH EXTENDS INTRA-ANALLY.





# NON-MALIGNANT STRICTURES – ANAL STENOSIS

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- × **Spasmodic** An anal fissure causes spasm of the internal sphincter
- × **Organic** Anal stenosis is a rare but serious complication of anorectal surgery, Other causes include trauma, inflammatory bowel disease, radiation
- × *Postoperative stricture*
- × *Irradiation stricture*
- × *Senile anal stenosis*

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- × *Lymphogranuloma inguinale*
  - × *Inflammatory bowel disease*
  - × *Endometriosis*
  - × *Neoplastic*

# CLINICAL FEATURES

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- ✘ Increasing difficulty in defaecation is the leading symptom.
- ✘ if the stools are formed, they are 'pipe-stem' in shape.
- ✘ In cases of inflammatory stricture, tenesmus, bleeding and the passage of mucus are superadded.

# TREATMENT

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- ✘ Before starting treatment, it is important to ascertain the cause of the stricture.
- ✘ Non-operative treatment is recommended for mild stenosis.
- ✘ The use of stool softeners and fibre supplements helps aid the passage of stools.



# PROPHYLACTIC

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- ✘ The passage of an anal dilator during convalescence after haemorrhoidectomy greatly reduces the incidence of postoperative stricture.

# ***DILATATION***

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- ✘ Anal dilatation can be performed under general anaesthesia and then, by the patient, using an anal dilator.

# ANOPLASTY

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- ✘ For severe anal stenosis, an anoplasty is used to replace loss of anal tissue.
- ✘ The stricture is incised and a rotation or advancement flap of skin and subcutaneous tissue replaces the defect

# COLOSTOMY

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- × Colostomy must be undertaken when a stricture is causing intestinal obstruction



# RECTAL EXCISION AND COLOANAL ANASTOMOSIS

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- ✗ When the strictures are at or just above the anorectal junction and are associated with a normal anal canal,

## Benign anal stricture

- May be spasmodic or organic
- May be iatrogenic, e.g. after haemorrhoidectomy or repair of imperforate anus
- Biopsy must be taken to rule out malignancy
- Can usually be managed by regular dilatation
- Severe anal stenosis may require an anoplasty

# MALIGNANT TUMOURS

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- ✘ Anal malignancy is rare and accounts for less than 2 per cent of all large bowel cancers.
- ✘ incidence rate is 0.65 per 100 000.
- ✘ Those arising below the dentate line are usually squamous,
- ✘ whereas those above are variously termed basaloid, cloacogenic or transitional.  
Collectively, they are known as epidermoid carcinomas,

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- ✘ A mass, pruritus or discharge is less common
  - ✘ Advanced tumours may cause faecal incontinence by invasion of the sphincters
  - ✘ in women, anterior extension may result in anovaginal fistulation.
  - ✘ primary treatment is by chemoradiotherapy

## Anal cancer

- Uncommon tumour, which is usually a squamous cell carcinoma
- Associated with human papilloma virus (HPV)
- More prevalent in patients with HIV infection
- May affect the anal verge or anal canal
- Lymphatic spread is to the inguinal lymph nodes
- Treatment is by chemoradiotherapy in the first instance
- Major ablative surgery is required if the above fails