

Complications of Haemorrhoidal Disease

BH Pienaar

Department of Surgery

University of Pretoria

Outline

- Introduction
 - Definition
 - Applicable anatomy
 - Pathophysiology
 - Classification
- Treatment options
 - Medical
 - Surgical
- Complications

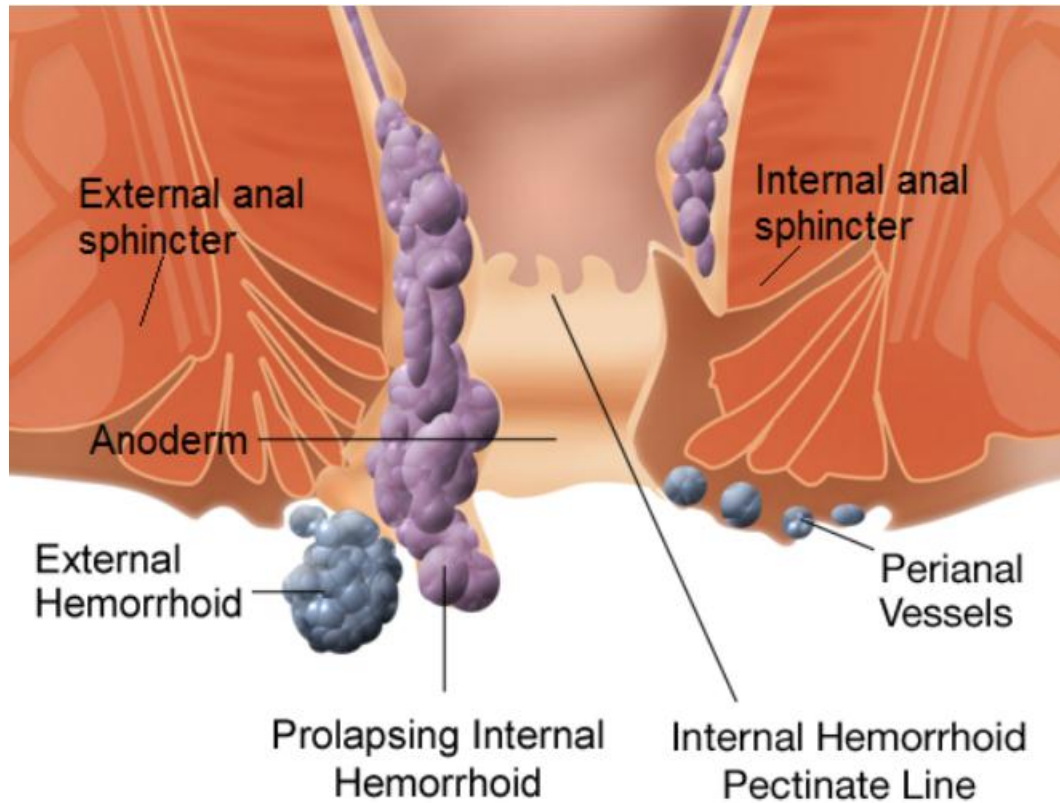
Introduction

- Epidemiology
 - 4.4% Western world general population
 - U.S. 1.5 million haemorrhoid related prescriptions
- Speculated to be due to low fiber diet
 - Common among
 - > 50yrs
 - Caucasians
 - Higher socio-economic status
 - Males>females

Hemorrhoidal cushions

- Contribute to the maintenance of anal continence and prevent stool leakage during coughing or sneezing
- Protects anal sphincter during defecation
- Sensory discriminatory function: ± 2.5 cm proximal to dentate line

SCHEMATIC VIEW



Haemorrhoid ?

- Cushions within the submucosal space of the anal canal
 - left lateral, right anterior and right posterior
- Found within these cushions
 - Blood vessels, elastic tissues, connective tissue, and smooth muscle
- Tissue contributes 15 – 20% of the resting pressure within the anal canal
- Not due to portal hypertension

Pathophysiology

- Submucosal arteriovenous plexus
 - ↑pressure (straining - ↓outflow - engorgement)
 - Laxity connective tissue (↓outflow – engorgement)
- Swelling of the cushions
- Protrusion
- Damage

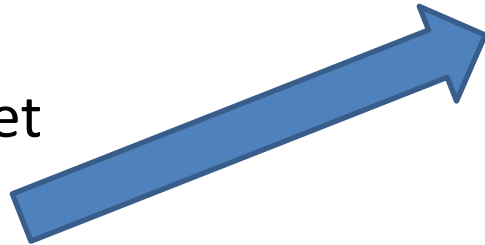
Pathophysiology

Preventable

- Constipation
- Prolonged straining
- Exercise
- Low-fiber diet
- Pregnancy
- Increased intra-abdo pressure
- Irregular bowel habits

Not preventable

- Aging
- Genetic
- Pregnancy



STAGING

- 1 NO PROLAPSE
- 2 PROLAPSE REDUCE
SPONTANEOUSLY
- 3 PROLAPSE REQUIRES
MANUAL REDUCTION
- 4 PROLAPSE PERMANENT

EXTENT

- INTERNAL
- EXTERNAL
- INTERO-EXTERNAL

MANAGEMENT BY DESTRUCTION

INSTRUMENTAL

- RUBBER BAND LIGATION
- SCLEROTHERAPY
- INFRARED
PHOTOCOAGULATION
- ELECTROCOAGULATION
- LASER COAGULATION
- CRYOTHERAPY

SURGICAL

- EXCISION
 - MILLIGAN MORGAN
 - FERGUSON
- VASCULAR PEDICLE
LIGATION TECHNIQUE
 - PPH (LONGO)
 - EEA
 - DOPPLER GUIDE LIGATION

What do we aim for?



COMPLICATIONS

EARLY

- PAIN
- URINARY RETENTION
- FISSURE
- CONSTIPATION
- THROMBOSIS
- STENOSIS
- PRURITUS
- RECTAL PERFORATION/SEPSIS
- HAEMORRHAGE

LATE

- HAEMORRHAGE/HAEMATOMA
- STENOSIS/TENESMUS
- INCONTINENCE
 - FLATUS
 - STOOL
- WEEPING ANUS
- RECTO VAGINAL FISTULA
- RECTAL PERFORATION/SEPSIS
- PENILE TRAUMA (STAPLES)
 - PARTNER

MANAGEMENT OF COMPLICATIONS

- PAIN
 - METHOD OF DISSECTION IN OPEN
 - STAPLING/DOPPLER
- LIFE THREATENING
 - BLEEDING
 - SEPTIC COMPLICATIONS

BEST WAY OF MANAGING COMPLICATIONS?

PREVENTION BY
METICULOUS
ATTENTION TO DETAIL