Complications of Haemorrhoidal Disease

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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
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
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<td>PROLAPSE REDUCE SPONTANEOUSLY</td>
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<td>PROLAPSE PERMANENT</td>
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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