Heart Burn - Pyrosis

Obedy MWANTEMBE MBchB (UNZA), MRCP(UK) PhD (Edin) FRCP(Edin)

- Specialist Physician /Gastroenterologist
- ARWYP MEDICAL CENTRE
- Kempton Park

- Affiliate: University of Pretoria
- SAMA 18/09/2015
Aim of the Presentation

• If I manage to get you join me in accepting that we are still a long way to understanding this disease, I will have achieved the goals of this presentation.

• It is humbling
THE MAGNITUDE

- 25-40% of adults at least once a month symptomatic
- 7-(5 have symptoms daily
THE QUALITY OF LIFE vs DISEASE

GERD Impacts Quality of Life

Life with Heartburn

Heartburn Affects....

- Mood and general well-being
- Social activities
- Day-to-day function
- Function at work
- Spouse’s sleep

COMPLIANCE

• Because of Quality of life – Compliance with effective is generally a given
MECHANISM

• The oesophagus
• The valve
• The Stomach
The Oesophagus

• Intrinsic
  – Perstalsis
  – Mucosal integrity

• Extrinsic – Saliva
THE VALVE (High Pressure Zone)

• Position
  – Intrabdominal
  – Diaphragmatic help

• Transient Relaxations (tLES)
  – Ventilation appropriate (Both up and down!)

• Abdominal pressure must not be too high
Transient Lower Esophageal Relaxations

• Commonest cause and affected by
  – Foods
    • Coffee, fatty meals, alcohol etc
  – Smoking
  – Drugs
    • Beta agonists, anticholinergics, Calcium channel inhibitors
  – Hormone
  – Progestogens
The STOMACH

- Delayed Gastric Emptying
- Too full a stomach
CLINIC

• Heart burn!
• Heart Burn
• Odynophagia

• loss of weight
CLINIC

• Extraoesophageal manifestations
  – Cough
  – Asthma
  – Recurrent Pneumonias
  – Laryngitis, non cardiac chest pain, Dental problems
  – More cost effective to try acid suppression here than perform invasive tests (not a Western recommendation)
ALARM FEATURES

• Loss of weight
• Dysphagia
GERD and Heart Burn

• Commonly the case but not invariably
• Achalasia
• Other Motility Disorders
  – Nut Crucker oesophagus
  – Diffuse spasms of oesophagus
• Infections
  – Fungi
  – Viral
Factors Causing Reflux

• Altered OG junction
  – Weight
  – Hernia

• Pregnancy (45 - 80%)
Pregnancy and Heartburn

– Altered Oesophageal Motility
– Increased gastric pressure
– Decreased lower oesophageal Sphincter pressure
– Fetus pressure
– Altered OG angle
APPROACH TO MANAGEMENT

• Self Medication has a bearing
• Anti acids
• H2 Antagonists
• Proton Pump Inhibitors
• Proton Pump Blockers
LIFE STYLE MODIFICATION

• Diet
  – Tomato
  – Fizzy drinks
  – Coffee, chocolate
  – Wine

• Raising the head of the Bed for sleeping 8cm

• Avoid eating solids within 3hrs of bed time

• Weight Loss
MEDICATION

• H2 Antagonists
  – Killed ulcer surgery 80’s
  – Short term effect – tachyphylaxis
  – Still useful ? Break thru heartburn
PROTON PUMP INHIBITORS

• The main stay
• Helps in Diagnosis
  – If there is no response to a Double Dose PPI taken correctly then the diagnosis should be reconsidered.
THE ROLE OF OTHER INVESTIGATIONS

• ENDOSCOPY
• pH studies
• Impedance studies
• Manometry
• Radiography
RADIOGRAPHY

• More accessible
• Can reflux and extent
• Can show mucosal lesions if gross
• Can show hernia and size
• Good for volume refluxers
GASTROSCOPY

- Operator dependent
- Shows Mucosal lesions with grading
- Will pick up fixed hernias
- Reflux is inferred from the lesions
- Can show premalignant lesions
- Allows for biopsy
pH Studies

• Not readily accessible
• Will document abnormal pH episodes
  – When, How long, Duration, posture,
  – Link the above with symptoms
  – De Meester score above 14.7
    • The higher the worse the reflux not necessarily symptoms!
IMPEDANCE

• Same as pH studies but for
  – Alkaline
  – Solid
  – Liquid
  – Acid
  – Etc more informative and more expensive
Maintanance

• How Much?
• How Long?
SIDE EFFECTS

• The Acid Barrier
  – Infections
  – Clostridia Difficile
    • Elderly
    • In the homes

• Malabsorption
  – Osteoporosis

• Drug Interactions
  – ARVs
  – Methotrxate
INFECTIONS

• Pneumonia
• Small Bowel bacterial overgrowth
• Clostridia Difficile colitis
  – Pseudomembranous colitis
    • Elderly
    • Longterm use
    • Recurrent infections
Malabsorption

- Iron and Vit B12
- Magnesium
- Calcium
  - Inhibits osteoclastic activity
Surgery

- Volume Refluxers – No debate here
- Must respond to PPI or adequate treatment
- Manometry should be mandatory
- pH is done but not really mandatory
- Endoscopic fundolication – not done well after 6 months
- Laparoscopic fundoplicated patients eventually need some PPI supplements!
SUMMARY

• Common and self treated
• No sledge hammer to kill a fly use a flyswatter
• Treatment can be PRN
• Compliance is guaranteed
• Mind alarm symptoms
• No room for Proton Pump Blockers in this condition