

Heart Burn - Pyrosis

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Aim of the Presentation

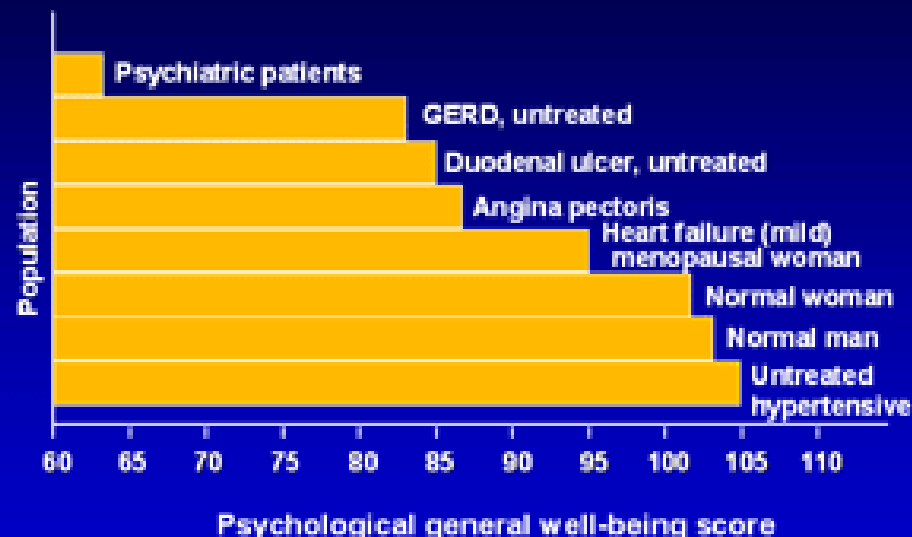
- If I manage to get you join me in accepting that we are still a long way to understanding this disease, I will have achieved the goals of this presentation.
- It is humbling

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

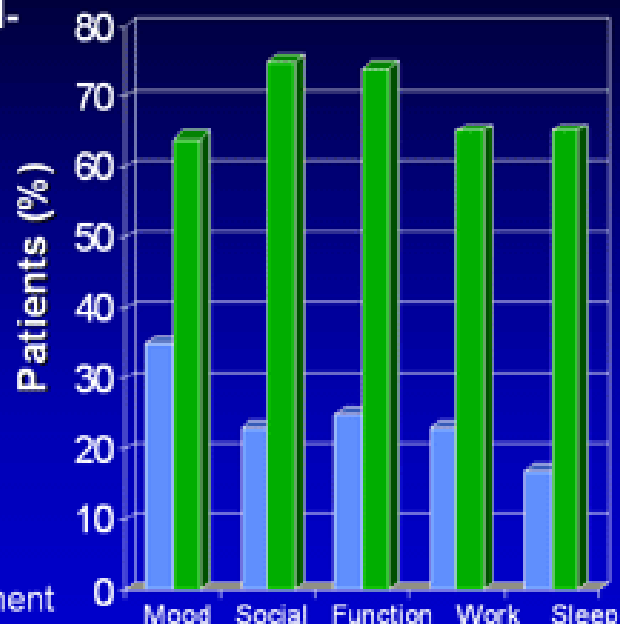
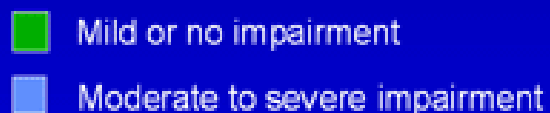


The World Almanac and Book of Facts, 2000. World Almanac Books; 1999.

Life with Heartburn

Heartburn Affects....

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



The Gallup Organization. Princeton, NJ; May 1, 2000.

COMPLIANCE

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

MECHANISM

- The oesophagus
- The valve
- The Stomach

The Oesophagus

- Intrinsic
 - Peristalsis
 - 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 Cracker 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 accesible
- 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

Maintenance

- 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 fundoligation – 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