GERD

Objectives:

- How patient presents
- Risk factors
- Diagnosis
- Update in management
- When to refer

[Color index : Important | Notes | Extra]

References:Medicine team 435.

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❖ Clinical features :

- The major symptoms are:

    1. **Heartburn** and regurgitation, often provoked by bending, straining or lying down.
    2. ‘Water brash’, which is salivation due to reflex salivary glands stimulation as acid enters the gullet, is often present.
    3. Patient is often overweight.
    4. Waking at night by choking as refluxed fluid irritates the larynx.
    5. Odynophagia (pain during swallowing).
    6. **Dysphagia** **is a complication of GERD which happens due to stricture formation or edema.**
    7. **Atypical chest pain** which may be severe and can mimic angina, and may be due to reflux-induced esophageal spasm.
    8. Hoarseness (‘acid laryngitis’).
    9. Recurrent chest infections.
    10. Chronic cough.
    11. Asthma.

- The true relationship of these features to gastro-esophageal reflux disease remains unclear.

❖ Risk factors:

1. **Medical conditions:**
    a. Obesity.
    b. Hiatus hernia.
    c. Systemic sclerosis (scleroderma).
    d. Ageing.
    e. Pregnancy.

2. **Social:**
    a. Large meals.
    b. Eating late at night (before bedtime).
    c. Fat, chocolate, coffee or alcohol ingestion.
    d. Cigarette smoking.

3. **Medications:**
    a. Calcium channel blockers (e.g.; nifedipine).
    b. Nitrates.
    c. Anticholinergics (e.g.; propantheline).
    d. NSAIDs (e.g.; aspirin, ibuprofen).

❖ Diagnosis:

- Most Cases are diagnosed with good history.
- If you need to investigate make sure you exclude **(Barrett's Esophagus, Hiatal hernia) using endoscopy.**
- If young + NO alarming symptoms ⟶ empirical treatment may be appropriate without doing any investigations.

<table>
<tr><th colspan="4">Investigations</th></tr>
<tr><th>1- Endoscopy with biopsy</th><th>2- Barium study</th><th>3- Twenty-four–hour pH monitoring</th><th>4- Esophageal manometry</th></tr>
<tr>
<td rowspan="3">• The test of choice but not necessary for typical uncomplicated cases.

Indications:
1- Indicated if heartburn is refractory to treatment.
2- accompanied by dysphagia, odynophagia, or GI bleeding.

• A biopsy should also be performed to assess changes in esophageal mucosa
(Barrett’s esophagus)</td>
<td rowspan="3">• Helpful in identifying complications of GERD(strictures/ ulcerations)

• Cannot diagnose GERD itself</td>
<td rowspan="3">• Performed in the lower esophagus

• Most sensitive and specific test
(Gold Standard)

• Usually not performed</td>
<td>• used if a motility disorder is suspected</td>
</tr>
<tr><th>5- CXR</th></tr>
<tr><td>Usually normal unless it is complicated</td></tr>
</table>

❖ Treatment:

- The main goals of treatment are to control symptoms and to prevent complications.
- Proton pump inhibitors are the most effective drugs for acid suppression and are the mainstay of treatment

Lifestyle Changes	• weight loss for overweight people. • smoking cessation for tobacco smokers. • head-of-bed-elevation. • avoidance of late-night eating if nocturnal symptoms are present. • Routine food eliminations (e.g chocolate, caffeine, alcohol, acidic and/or spicy foods).
Proton Pump Inhibitors	• Omeprazole - esomeprazole - rabeprazole - pantoprazole. • Used at initial presentation and usually maintained. • Treatment is continued for 8 weeks. • After 8 weeks, it is discontinued. If the patient relapses, long-term PPI are indicated. • Increase risk of clostridium (C.diff) gut infections. • Reduces absorption of nutrients (Ca ,Mg).
H2 antagonist	• Ranitidine - famotidine - nizatidine - cimetidine. • Less effective than PPIs. • Used as adjunct to PPIs if nocturnal symptoms are present.
Surgery	• Laparoscopic Nissen, Toupet (270º) or anterior (180º) fundoplications. • For people with a good response to PPIs but who do not wish to take long-term medical treatment (e.g., side effects or non-adherence). • Risk of recurrence is 17.7%. • Risk factors for reflux recurrence included: female sex, older age, and presence of comorbid conditions.
❖ Acute GERD: PPI + Lifestyle changes. ❖ Still ongoing continue PPI. Surgery is the second line. ❖ Ongoing with nocturnal symptoms add H2 antagonists.	

- Patients who present with complicated or atypical GERD (e.g., dysphagia or evidence of GI bleeding) usually have must be referred for immediate endoscopy.
- Those above 40 years or symptoms last more than 5 years usually do an endoscopy.