**Dyspepsia**

**Definition**

* Chronic or recurrent pain or discomfort centered in the upper abdomen, “indigestion”
* Associated with bloating, early satiety, nausea, vomiting
* Can be intermittent, continuous, and may or may not be related to meals
* Prevalence: 25-50% in Western countries

**Figure 2.**

**Approach to Dyspepsia**

**Figure 1.**

**Alarm Symptoms**

1. GI blood loss

2. Unintended weight loss

3. Progressive dysphagia

4. Persistent vomiting

5. FHx of cancer

**Figure 3.**

**Figure 4.**

**Differential Diagnoses** (Table 2, AFP)

* Functional (idiopathic, non-ulcer) (up to 70%)
* Peptic ulcer disease (gastroduodenal) (15-25%)
* Reflux esophagitis (5-15%)
* Gastric or esophageal cancer (<2%)
* Other differential diagnoses are rare:
* Abdominal cancer (esp pancreatic)
* Biliary tract disease
* CHO malabsorption
* Gastroparesis
* Hepatoma, etc.

**Risk Factors**

* Medications: ASA, NSAIDs (Table 3, AFP)
* EtOH and tobacco are potential triggers
* Emotional stress frequently associated with functional dyspepsia

**Gastroesophageal Reflux Disease**

* Most common condition to affect the esophagus
* Can range from heartburn with endoscopy-negative reflux disease to ulcers, stricture, Barrett's
* Everyone has some degree of GE reflux → Pathological when there are sx + complications

**Pathophysiology**

Reflux of gastric contents into the esophagus, can occur with and without hiatus hernia

Factors:

LES function, intra-abdominal pressure

Peristalsis, salivation, Mucosal defense

**Clinical Features**

Heartburn, acid regurgitation after eating certain foods or following various postural maneuvers

Waterbrash, angina-like chest pain, dysphagia, respiratory symptoms, odynophagia rare

Common in pregnancy (↑intra-abdominal pressure and LES relaxant effect of progesterone)

If severe, stricture formation → wt loss (↓intake)

Aspiration: consolidation, bronchospasm, fibrosis

**Diagnosis m**ostly via history and physical

Investigations reserved to answer following:

Amount of reflux abnormal?

Symptoms due to reflux?

Mucosal damage or other complications?

Patients with long-standing GERD → endoscopy

5-10% will have Barrett's (if > 5y of symptoms)

If young, typical and infrequent symptoms → empiric therapy

**Treatment**

Lifestyle Modifications

Elevate head of bed, Quit smoking, Avoid recumbency for 3h after eating

Avoid trigger foods/drinks, Losing weight

Acid suppression: antacids, alginates, H2RA, PPI

Refractory Symptoms → endoscopy

Pregnancy: antacids, alginates, cimetidine

**Oral Acid Suppressants**

**Helicobacter pylori Infection**

* Most common gastric bacterial infection worldwide, Prevalence: 20-30% in Western world
* Most H. pylori-infected individuals have associated gastritis, although many have no symptoms
* Associated with increasing risk of PUD, gastric cancer, gastric MALT lymphoma
* Antral gastritis → atrophic gastritis + intestinal metaplasia → gastric cancer
* Risk factors: Immigration from a developing country, low SES, family overcrowding

**Testing**

\* Serology: unable to differentiate active from past infection. Will remain positive for several years following successful treatment.

\*\* UBT, endoscopic gastric biopsy, fecal antigen testing may be affected by medications such as antibiotics and acid lowering agents → hold bismuth and antibiotics x 28d and PPI for 7-14d prior to testing.

**H. pylori Eradication**

* Small but statistically significant improvement in functional dyspepsia symptoms
* Decreases risk of PUD and its complications
* NNT=15 for relief of symptoms
* Cost-effectiveness unknown

**Prokinetics for Functional Dyspepsia**

* Target patients with predominant symptoms of bloating, early satiation, nausea, and vomiting
* Aim: improve GI motility
* Domperidone, metoclopramide, erythromycin, peppermint
* Evidence poor

**CCFP Objective #1**

In a patient presenting with dyspepsia, include cardiovascular disease in the differential diagnosis.

**CCFP Objective #2**

Attempt to differentiate, by history and physical examination, between conditions presenting with dyspepsia (e.g., gastroesophageal reflux disease, gastritis, ulcer, cancer), as plans for investigation and management may be very different.

**CCFP Objective #3**

In a patient presenting with dyspepsia, ask about and examine the patient for worrisome signs/symptoms (e.g., gastrointestinal bleeding, weight loss, dysphagia).

**Resources**

Loyd, RA et al. Update on the evaluation and management of functional dyspepsia. *Am Fam Physician.* 2011; 83(5): 547-552.

*First Principles of Gastroenterology*

Uptodate: Approach to patient with dyspepsia

McMaster Module on Dyspepsia

BC Guidelines: Dyspepsia, GERD