Dyspepsia Clinical Guidelines

Definition

Dyspepsia describes a range of upper GI symptoms, typically present for ≥4 weeks. Heartburn, gastric reflux, bloating, nausea and/or vomiting, postprandial fullness, early satiation, epigastric pain, or burning.

Assessment (History and Examination)

Approach to the evaluation and management of dyspepsia in adults

age ≥60 years OR patients <60 years with any of the following :
- Clinically significant weight loss (>5 percent usual body weight over 6 to 12 months).
- Overt gastrointestinal bleeding.
- >1 other alarm feature or Rapidly progressive alarm features:
  - Unintentional weight loss
  - Dysphagia
  - Odynophagia
  - Unexplained iron deficiency anemia
  - Persistent vomiting
  - Palpable mass or lymphadenopathy
  - Family history of upper gastrointestinal cancer

No → **Work up of uninvestigated Dyspepsia Box 1** → Work up indicates Organic disease → Yes → **Treat underlying cause**; No → Functional Dyspepsia

Yes → Upper endoscopy with gastric biopsy → Organic disease
- Yes → Treat under underlying cause
- No → **Functional Dyspepsia**

Functional Dyspepsia → Evaluate for active H. pylori infection
- Present → Eradicate H. pylori → Persistent symptoms → Trial of PPI 4-8 w → Persistent symptoms → Yes → Trial of TCA
- Absent → Trial of PPI 4-8 weeks → Persistent symptoms → Yes → Trial of TCA 8-12 weeks. Consider discontinuation of PPI, unless partial improvement

Trial of TCA → Review symptoms in 8-12 weeks
- Improved → Continue 6 months, Resume if symptoms recur
- Persistent → Trial of prokinetic for 4 weeks. Discontinue TCA
  - Improved → Discontinue prokinetic, repeat if symptoms recur
  - Persistent → Reevaluate symptoms. OGD if not already performed. GI referral

Description of condition

Dyspepsia describes a range of upper GI symptoms, typically present for ≥4 weeks. Heartburn, gastric reflux, bloating, nausea and/or vomiting, postprandial fullness, early satiation, epigastric pain, or burning.

Magnitude of the condition

It occurs in at least 20 % of the population. Up to 75 % have functional dyspepsia. Approximately 25 % of patients with dyspepsia have an underlying organic cause

Underlying cause

functional dyspepsia, Gastro-esophageal reflux disease, Peptic ulcer disease, gastro-esophageal malignancy, cardiac, gallbladder disease, pancreatic disease, Medications (potassium supplements, digoxin, iron, theophylline, oral antibiotics, NSAIDs, steroids, niacin, gemfibrozil, narcotics, colchicine, quinidine, estrogens, levodopa).

Workup of uninvestigated dyspepsia Box1

History: detailed history is necessary to determine the underlying cause and to identify patients with alarm.
Physical examination: usually normal, except for epigastric tenderness. Signs of dyspepsia secondary to organic disease may be evident.
Laboratory tests — Routine blood counts and blood chemistry including liver function tests, serum lipase, and amylase, should be performed to identify patients with alarm features (eg, iron deficiency anemia) and underlying metabolic diseases that can cause dyspepsia (eg, diabetes, hypercalcemia)

Management

How to test for H Pylori	•urea (13C) breath test **OR** Stool Antigen test (SAT) be used for evaluation of active infection •Tests should **not be performed within 2 weeks of treatment with a proton pump inhibitor or within 4 weeks of antibacterial treatment, as this can lead to false negatives.**
When to repeat test to confirm eradication?	**ROUTINE check for eradication is NOT recommended .** Confirm eradication if : stomach cancer, MALT lymphoma, Hx of PUD specially if bleeding and persistent symptoms after treatment.
Non-drug treatment	Lifestyle measures, such as healthy eating, weight loss , avoiding trigger foods, eating smaller meals, eating the evening meal 3–4 hours before going to bed, raising the head of the bed, Smoking cessation, and reducing alcohol consumption Assess the patient for stress and anxiety as these conditions may exacerbate symptoms
Treatment Regimens for H pylori	**1st Line** **Standard triple therapy** : PPI, amoxicillin 1 g, and clarithromycin 500 mg (Biaxin) twice daily 7-10 day up to 14 days **OR** PPI, clarithromycin 500 mg, and metronidazole 500 mg (Flagyl) twice daily 10-14 days **Sequential therapy:** PPI and amoxicillin 1 g twice daily, followed by PPI, clarithromycin 500 mg, and tinidazole 500 mg (Tindamax) or metronidazole 500 mg twice daily. 10 days (5 days each) **2nd line** **Non–bismuth-based quadruple therapy (concomitant therapy):**PPI, amoxicillin 1 g, clarithromycin 500 mg, and tinidazole 500 mg or metronidazole 500 mg twice daily for 10 days **Bismuth-based quadruple therapy:** Bismuth subsalicylate 525 mg or subcitrate 300 mg, metronidazole 250 mg, and tetracycline 500 mg, four times daily; and PPI twice daily 10-14 days **Levofloxacin-based triple therapy:** PPI and amoxicillin 1 g twice daily, and levofloxacin 500 mg (Levaquin) once daily 10 days
Proton Pump Inhibitor (PPI)	**Examples: esomeprazole , omeprazole , lansoprazole , Pantoprazole** **Indications:** for H pylori eradication use higher dose twice daily , prophylaxis of NSAIDs associated ulcer, PUD, dyspepsia **Side effects : Common:** Abdominal pain; constipation; diarrhea; dizziness; dry mouth;; headache; insomnia; nausea; skin reactions; vomiting. **Uncommon** Arthralgia; bone fractures; confusion; depression; drowsiness; leucopenia; malaise; myalgia; paranesthesia; peripheral edema; thrombocytopenia; vertigo; vision disorders. Gynecomastia, taste alteration **Safety Information:** Hypomagnesaemia (more common after 1 year of treatment, but sometimes after 3 months of treatment, **monitor** especially if on digoxin); subacute cutaneous lupus erythematosus., risk of osteoporosis. **Hepatic & Renal impairment:** Use with caution. **Pregnancy & breast feeding :** can use omeprazole .

	Omeprazole	Lansoprazole	Pantoprazole	Esomeprazole
H pylori Eradication	20-40mg BID 10-14 days	30 mg bid 10-14 days	40 mg bid 10-14 days	20 mg bid for 10-14 days
Gastric ulcer	20-40 mg OD 8 weeks	30 mg od 8 weeks	40-80 mg od 8 weeks	20 mg od 4-8 weeks
Duodenal ulcer	20-40mg OD 4 weeks	30 mg od 4 weeks	40-80 mg od 4 weeks	
Prophylaxis with NSAIDs	20 mg od	15-30mg od	20 mg daily	20 mg daily
GERD	20 mg od 4 week 10-40 mg od for long term only if symptoms return	30mg od 4 weeks 15-30mg od for long term only if symptoms return	40 mg 4-8 weeks	20 mg daily 4-8 weeks for long term only if symptoms return
Functional dyspepsia	10 mg od 4 weeks	15 mg od 4 weeks	20 mg od 4 weeks	20 mg od 4 weeks
Esophagitis	40 mg od 8 weeks , longer if appropriate	30 mg od 8 weeks longer if appropriate	40mg od 8 weeks longer if appropriate	40mg od 8 weeks longer if appropriate

APPROVL			
	Name:	**Position:**	**Signature:**
Prepared By:	Dr. Hajar Al Suma	FM Consultant	
Reviewed and Approved By:	Dr. Mansoor Allajhar Dr. Musa Althwayee Dr. Ahmed Al Zahrani Dr. Hajar Al Suma Dr. Ahlam Al Harbi	FM Consultants	

References.

- American College of Gastroenterology (ACG) Guidelines
- The Canadian Association of Gastroenterology (CAG) guidelines