#### **Medical Guidelines**

## **Guidelines for the Management of Dyspepsia**

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Dyspepsia is a very common health problem with significant financial burdens, poor quality of life, and social impacts. It's also a difficult-to-treat symptom and has many potential organic and non-organic causes. The list of investigations is wide and not practical in resource-limited countries. H-Pylori infection is very prevalent in Pakistan due to overcrowding and contaminated food & water. H-pylori is a major cause of gastric cancer. The risk of gastric cancer is also high due to a lack of a healthy diet containing anti-oxidants, the use of a smoked diet, and smoking. <sup>1</sup>

These guidelines are mainly derived from the joint recommendations of the American Society of Gastroenterology (ASG) & Canadian Society of Gastroenterology (CSG). However, considering our health system and lack of health awareness among the public, we need to tailor these according to our resources and limitations. As patients easily lose the follow-up, and many other non-medical personnel play their roles, it's hard for us to keep those with alarming symptoms for subsequent follow-up. At the same time, our health system can't afford to offer endoscopy for everyone with dyspepsia. Therefore, we must find the right balance in managing patients with dyspepsia.

**Definition of dyspepsia:** Dyspepsia is epigastric pain present for at least one month. It may be associated with other symptoms such as epigastric fullness, nausea, vomiting, reflux, etc. However, the pain should be the patient's main symptom if it's associated with other symptoms. It's also important to exclude other causes of epigastric pain, such as biliary or pancreatic pathologies. Clues such as pain radiating to the back, dyspepsia in obese middle-aged females, etc., are helpful to test for these possibilities. Ultrasound or C.T. abdomen is often beneficial.

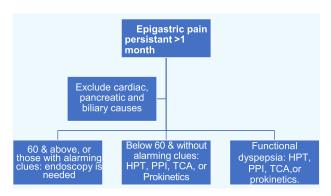
**Functional dyspepsia:** Functional dyspepsia (F.D.) means the absence of any organic cause, ruled out by endoscopy and other relevant tests.

*Alarming symptoms and signs of dyspepsia:* Alarming symptoms or findings associated with dyspepsia include weight loss, dysphagia, vomiting, or anemia. These findings are worrisome as they may be due to underlying malignancy. However, there are many other reasons for these symptoms.<sup>2</sup>

However, these clues are more relevant when they are progressive or when multiple clues exist. The intermittent or non-progressive nature of the symptoms is less significant. Also, presence in a young age <40 is less important when compared to those in a 50-plus patient. So, the age of the patient adds further weight to these clues.

Exclude non-gastric causes: Exclusion of other causes of epigastric pain is important when clinically indicated. These include pancreatic, biliary, and cardiac causes, which can present as epigastric pain. ECG, cardiac workup, and ultrasound are especially helpful when clinically indicated based on history and examination.

*Upper G.I. Endoscopy:* Endoscopy is an expensive,



invasive test that carries a risk of complications. It also does not test positive for many cases of dyspepsia. Therefore, it's important to select patients with a higher yield of the endoscopy carefully.

HPT (H-Pylori test and treatment), PPI (proton pump

# inhibitors), TCA (tricyclic antidepressants). Management Guidelines

#### Age 60 and above;

- 1. These patients should have an endoscopy to exclude any underlying cancer.
- 2. Those with negative endoscopy are tested for H-Pylori & treated if positive for H-Pylori.
- 3. Those who don't respond to H-Pylori eradication or negative testing for H-Pylori are treated with PPI.
- 4. Failure of H-pylori treatment and PPI is managed with TCA or prokinetics.
- 5. Failure of all of the above needs psychological assessment.

#### Age below 60

#### Who needs endoscopy?

- These cases often don't need endoscopy as the risk of gastric C.A. is low.
- Asians have a higher risk of gastric C.A., and endoscopy may be considered even if they are below 60. This is especially important for those with persistent, progressive, or a combination of alarming symptoms.
- Those with a family history of gastric C.A. should also have an endoscopy early.
- A combination of alarming or progressive alarming symptoms should also be managed on a case-to-case basis, and endoscopy is an option even when they are below 60.

#### Standard management

- 1. Non-invasive H-pylori testing is the first step for those below 60 who don't have a high risk of gastric C.A. H pylori serology doesn't differentiate active from past infection. A urea breath test or fecal antigens are non-invasive tests for H-pylori. PPI should be held before testing for H-pylori. Those who are positive should be given eradication therapy.
- 2. Those who are negative for H-pylori or those who

- don't respond to eradication therapy should be treated with PPI.
- 3. If H-Pylori eradication therapy & PPI fail, then prokinetics are the next option.
- 4. TCA is an option if H-pylori eradication, PPI, and prokinetic fail.<sup>3</sup>

#### Functional dyspepsia management

- 1. H-pylori testing should be done and treated if positive.
- 2. If H-pylori is negative or eradication therapy fails, PPI should be tried.
- 3. TCA manages failure of H-Pylori therapy and PPI.
- 4. Prokinetics are tried if H-Pylori therapy, PPI, and TCA fail.
- 5. Failure of all of the above needs psychological therapy.<sup>4</sup>

#### Summary of the guidelines

- 1. Age above 60 or those with alarming symptoms & signs need an endoscopy.
- 2. H-pylori testing and treatment are necessary as the next step (with normal endoscopy or without endoscopy).
- 3. PPI, prokinetics, and TCA are second, third, and fourth options. TCA is preferred over prokinetics for the management of functional dyspepsia.

#### References

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**Table 1:** Summarized guidelines for dyspepsia.

Table 1: Summarizea guiaetines for ayspepsia.						
Age and risk factors	Need for Endoscopy	First line	Second option	Third option	Fourth option	Fifth option
Age 60 & above	Yes	H.P. test and treatment	PPI	Prokinetics	TCA	Psychological
Age below 60 with alarming symptoms	Yes	H.P. test and treatment	PPI	Prokinetics	TCA	Psychological
Age below 60 without alarming symptoms	No	H.P. test and treatment	PPI	Prokinetic	TCA	Psychological
Functional dyspepsia	Endoscopy should be normal.	H.P. test and treatment	PPI	TCA	Prokinetics	Psychological

HP. (H-Pylori), PPI (proton pump inhibitors), TCA (tricyclic antidepressants)