

Case Series on Persistent Dyspepsia Even After Treatment with Proton Pump Inhibitors

Dr. R. Jayakumar¹, Dr. D.N Renganathan², Dr. D.J Balaji³
Dr. A. Balamurugan⁴, Dr. J. Sathish Kumar⁵, Dr. P. Vignesh⁶, Dr. V.S. Venkadesan⁷

¹(Department of General Surgery, Coimbatore Medical College and Hospital, India)

²(Department of General Surgery, Coimbatore Medical College and Hospital, India)

Abstract: *Dyspepsia is a common gastrointestinal process that can generate symptoms of heartburn and chest pain. Proton pump inhibitors (PPIs) are the gold standard for the treatment of dyspepsia; however, a substantial group of dyspepsia patients fail to respond to PPIs (Rabeprazole). In the past, it was believed that acid reflux into the esophagus causes all, or at least the majority, of symptoms attributed to dyspepsia, with both erosive esophagitis and nonerosive outcomes. However, with modern testing techniques it has been shown that, in addition to acid reflux, the reflux of nonacid gastric and duodenal contents into the esophagus may also induce dyspepsia symptoms. Here we report 5 cases who were treated on proton pump inhibitors on detailed investigations revealed an alternative cause for dyspepsia. The authors aim to clarify the Pathophysiology, definition, diagnostic techniques and treatment of patients with heartburn symptoms who symptoms of dyspepsia continues even after treatment with PPI (rabeprazole).*

Keywords: *Gastroesophageal reflux disease, Heartburn, Proton pump inhibitor*

I. Introduction

Indigestion, also known as **dyspepsia**, is a condition of impaired digestion. Symptoms may include upper abdominal fullness, heartburn, nausea, belching, or upper abdominal pain. People may also experience feeling full earlier than expected when eating. Dyspepsia is a common problem and is frequently caused by gastroesophageal reflux disease (GERD) or gastritis. In a small minority it may be the first symptom of peptic ulcer disease (an ulcer of the stomach or duodenum) and occasionally cancer. Functional indigestion (previously called nonulcer dyspepsia) is indigestion "without evidence of an organic disease that is likely to explain the symptoms". Functional indigestion is estimated to affect about 15% of the general population in western countries. PPI (rabeprazole) is very effective in treatment of dyspepsia and hence when a patient's symptoms of dyspepsia do not decrease even after treatment with PPI (rabeprazole) we have to look for an alternative cause for dyspepsia and thoroughly investigate the patient with USG abdomen and pelvis and OGD scopy

II. Materials And Methods

Study Area :

Coimbatore Medical College Hospital [CMCH], Coimbatore.

Study population: Patients admitted in CMCH with symptoms of dyspepsia even after treatment with PPI (rabeprazole) who were referred from peripheral hospital

Study Period:

3 years From January 2014- December 2016

Sample Size: 5 patients with symptoms of dyspepsia even after treatment with PPI (rabeprazole) who were referred from peripheral hospital **5 patients who has persistent symptoms of dyspepsia inspite of treatment with proton pump inhibitors** who were referred from peripheral hospital **were followed up and were subjected to various other investigations including usg abdomen and pelvis and OGD scopy**

- A 40 year old female treated at PHC for epigastric pain and dyspepsia. Referred to nearby GH and did not feel better on treatment with Omeprazole. Referred to CMCH and evaluated with OGD scopy – showed **Achalasia cardia**. Endoscopic balloon dilatation done.
- A 43 year old male working as EB Lineman treated at nearby GH for dyspepsia for 10 days. Underwent native treatment for one month. Referred back to same GH and from there referred to CMCH. OGD scopy was normal USG abdomen showed **Liver metastasis**.
- A 52 year old male attended surgical OPD at CMCH was on Rabeprazole for past 6 years. OGD scopy and USG abdomen were normal. Patient was put on
- **Anti-depressants** and became totally asymptomatic.

- A 46 year old male came to CMCH OPD with epigastric pain and dyspepsia and was on Omeprazole for past 4 years.
OGD scopy and USG abdomen were normal.
PPI therapy was stopped and put on Anti-depressants but patient continued to be symptomatic.
He is probably suffering from **Non Ulcer Dyspepsia**.
- A 60 year old female came with complaints of dyspepsia and took Omeprazole on and off and became totally alright.
But Patient presented with recurrent episodes of pain to CMCH.
On OGD scopy – found to have Malignant ulcer – **Ca Stomach**.

III. Results

Proton pump inhibitors are very effective in treatment of dyspepsia but once the patient is not showing regression of symptoms to proton pump inhibitors for a period of 1 week, we have to investigate the patient thoroughly and have to find the cause for the dyspepsia and correct the cause to relieve the symptoms in our case series the diagnosis made in 5 patients were

- **Achalasia cardia.**
- **Liver metastasis.**
- **Non Ulcer Dyspepsia.**
- **Ca Stomach.**
- **Depressive disorder.**

IV. Discussion

Indigestion, also known as **dyspepsia**, is a condition of impaired digestion. Symptoms may include upper abdominal fullness, heartburn, nausea, belching, or upper abdominal pain. People may also experience feeling full earlier than expected when eating. Dyspepsia is a common problem and is frequently caused by gastroesophageal reflux disease (GERD) or gastritis. In a small minority it may be the first symptom of peptic ulcer disease (an ulcer of the stomach or duodenum) and occasionally cancer. Functional indigestion (previously called nonulcer dyspepsia) is indigestion "without evidence of an organic disease that is likely to explain the symptoms". Functional indigestion is estimated to affect about 15% of the general population in western countries. The various causes of dyspepsia are...

Non-ulcer indigestion

Post-infectious

Anxiety

Functional Diseases of the gastrointestinal tract

gastroesophageal reflux disease (GERD) and peptic ulcer disease. Less common causes include gastritis, gastric cancer, esophageal cancer, coeliac disease, food allergy, inflammatory bowel disease, chronic intestinal ischemia and gastroparesis.

Liver and pancreas diseases

cholelithiasis, chronic pancreatitis and pancreatic cancer.

Helicobacter pylori infection

Systemic diseases

coronary disease, congestive heart failure, diabetes mellitus, hyperparathyroidism, thyroid disease, and chronic renal disease.

Gastroesophageal reflux (GER) is a common gastrointestinal process that can generate symptoms of heartburn and chest pain. Proton pump inhibitors (PPIs) are the gold standard for the treatment of GER; however, a substantial group of patients the symptoms persists even after treatment with PPI. In these patients we have to do other investigations like USG abdomen and pelvis, OGD scopy and find out the cause for dyspepsia

V. Conclusion

In higher centres PPI started after OGD and USG Abdomen. In smaller centres where OGD and USG Abdomen are not available or not available or patient is not affordable, it is routine to prescribe PPI. We conclude if there is no improvement within one week do not repeat PPI without evaluation, since underlying cause of indigestion may be different.

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