

**A REVIEW STUDY - ETIOPATHOLOGICAL STUDY OF GASTRO ESOPHAGEAL  
REFLUX DISEASE IN TODAYS LIFESTYLE**Dr. Ujwala Pawar\*<sup>1</sup> and Dr. Vishal Tambe<sup>2</sup><sup>1</sup>Guide, Associate Professor and HOD Rognidan Vikriti Vigyan, Govt. Ayurved College, Nanded.<sup>2</sup>P.G. Scholar, Dept of Rognidan and Vikriti Vigyan, Govt. Ayurved College, Nanded.**\*Corresponding Author: Dr. Ujwala Pawar**

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**ABSTRACT**

Gastroesophageal reflux disease (GERD) is most prevalent gastro intestinal disorders. GERD reduced lower esophageal sphincter tone causes reflux the gastroduodenal contents into the esophagus or oropharynx (Regurgitation). GERD develop when increase in reflux acid in esophagus it causes Reflux esophagitis. Pathogenesis of GERD is similar to that of other acid secretory diseases, such as duodenal ulcer and gastric ulcer disease. In WESTERN countries, GERD is most common Gastro intestinal disease.

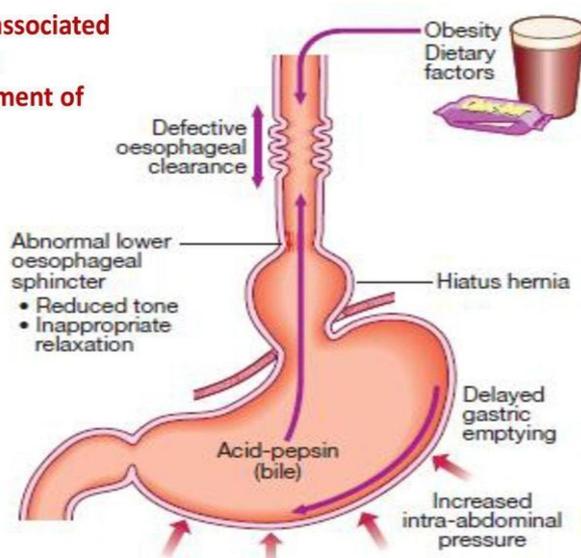
**KEYWORDS:** Gerd, Regurgitation, Reflux Esophagitis, Duodenal Ulcer, Gastric Ulcer.**INTRODUCTION**

Gastro-esophageal reflux disease (GERD) resulting in regurgitation of food and its causes heartburn. GERD is one of the most prevalent (30) gastro intestinal disorder. GERD develops when the esophageal mucosa is exposed to gastroduodenal contents for prolonged period of time, resulting esophagitis (lower end of esophagus). GERD causes mainly due to abnormality of lower esophageal

sphincter.

**MATERIALS AND METHODS**

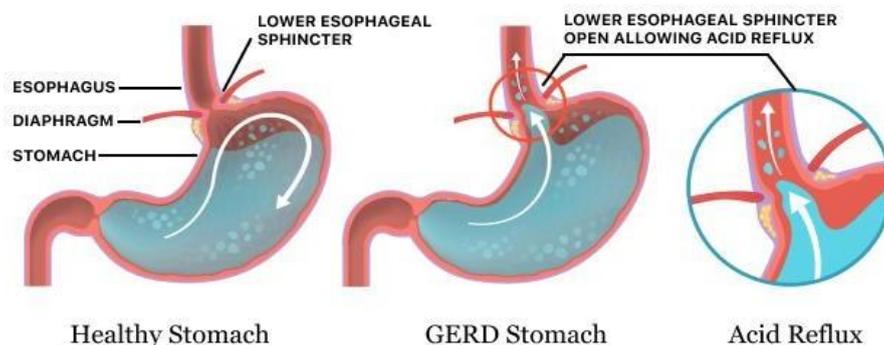
The classical ayurvedic and modern texts and all universally accepted electronic databases were analyzed for better understanding of etiopathogenesis of GERD in modern view.

**AETIOLOGICAL FACTORS****Factors associated  
with the  
development of  
(GERD)****Abnormality of the lower esophageal sphincter**

GERD reduced lower esophageal sphincter tone causes reflux the gastroduodenal contents into the esophagus or oropharynx (Regurgitation).

Rises intra-abdominal pressure causes regurgitate content into esophagus causes esophagitis at lower end of esophagus.<sup>[1]</sup>

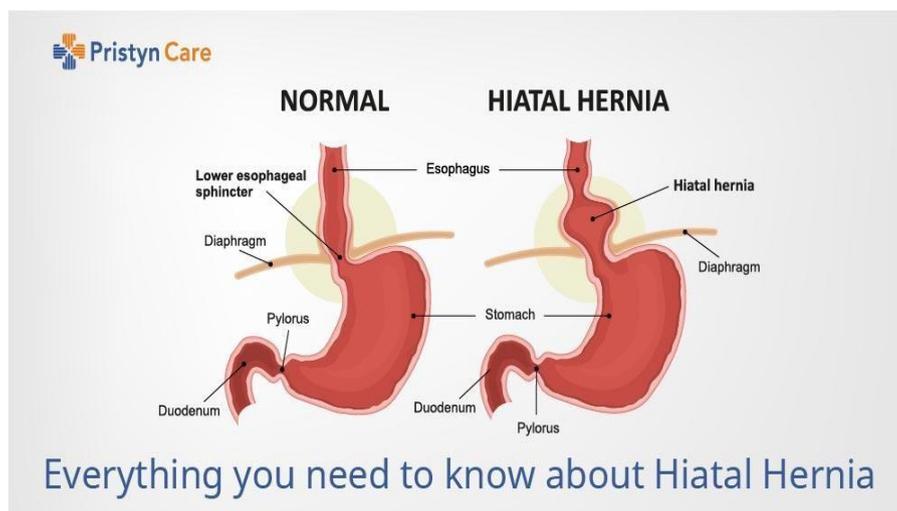
## Causes of Acid Reflux



### Hiatus Hernia

Hiatus hernia causes reflux because the pressure gradient loss between abdominal and thoracic cavities. Almost all patient who develop esophagitis, Barrett's esophagus, or peptic strictures have a hiatus hernia. Due to hiatus hernia angle between cardia and esophagus disappears.

In esophageal hiatal hernia increases acidic Gastro esophageal reflux due to low lower esophageal sphincter pressure and impairs esophageal acid exposure, including excessive esophageal acid exposure.<sup>[3]</sup>



### Delayed esophageal clearance

Poor esophageal clearance leads to increased acid exposure time. Defective esophageal peristaltic activity is commonly found in patient have esophagitis.

### Gastric contents

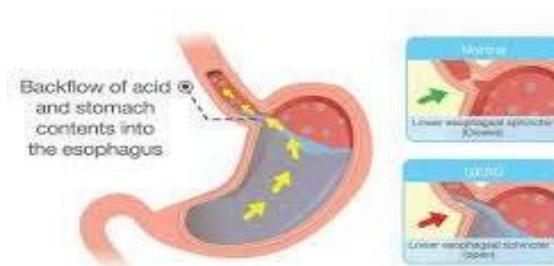
Gastric contents is esophageal irritant, and close relation between acid exposure time and symptoms. Pepsin and bile also contribute to mucosal injury.

Esophageal mucosal break in erosive GERD was characterized by excessive esophageal acid exposure and esophageal exposure increases severity of erosive GERD. Due to that lower esophageal sphincter relaxes and causes reflux esophagitis.

### Defective gastric emptying

Gastric emptying delayed in patients with GERD. Delayed gastric emptying uses excessive esophageal acid exposure and esophageal exposure increases severity of

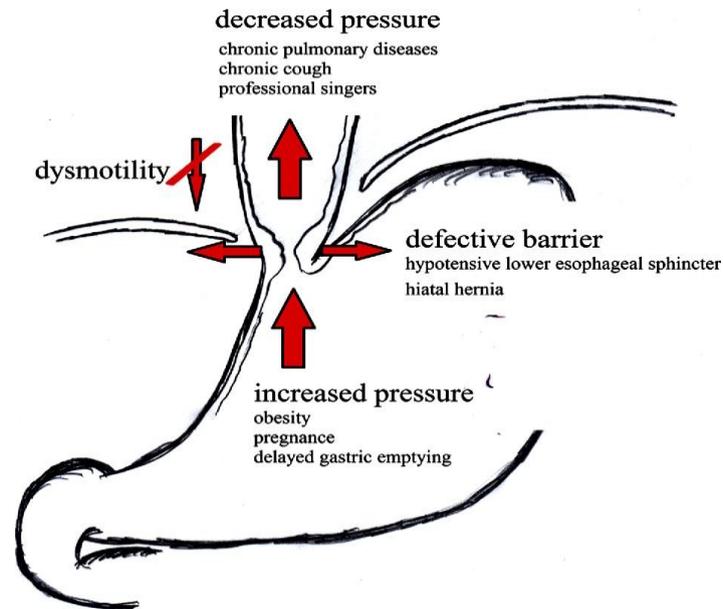
erosive GERD.



### Increased intra -abdominal pressure

Obesity and pregnancy are increases intra-abdominal pressure.

Increases intra -abdominal pressure causes reflux gastro duodenal contents into the esophagus causes excess acid exposure which result in esophagitis.



**Dietary and environmental factors**

Dietary fat, chocolate, alcohol, tea and coffee.

Relax the lower esophageal sphincter and provoke the symptoms and causes reflux of gastro duodenal contents result in erosion of lower end esophagus causes esophagitis<sup>4</sup>.

**PATHOPHYSIOLOGY**

Etiological factors

↓  
Reduce d lower esophageal sphincter tone

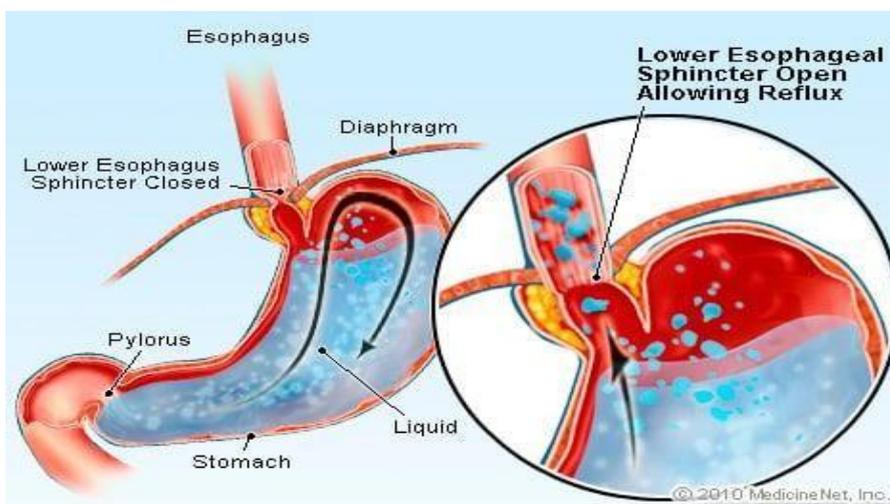
↓  
Reflux gastroduodenal content into esophagus

↓  
lower end of esophagus causes inflammation and ulceration

↓  
Reflux esophagitis. (Heartburn, chest pain, regurgitation)

GERD develop when increase in reflux acid in esophagus. Reflux acid harmful to the esophagus protective mechanisms such as esophageal acid clearance and mucosal resistance. Pathogenesis of GERD is similar to that of other acid secretory diseases, such as duodenal ulcer and gastric ulcer disease.

GERD are transient lower esophageal sphincter relaxations or decreased lower esophageal sphincter resting tone, impaired esophageal acid clearance, delayed gastric emptying, decreased salivation and impaired tissue clearances.



**Clinical features**

- Heartburn and regurgitation provoked by bending, standing or lying down

Waterbrash –

salivation due to reflex salivary gland stimulation as acid enters gullet.

- Odynophagia and Dysphagia.
- Atypical chest pain.
- Reflux induced – esophageal spasm.
- Hoarseness (Acid Laryngitis).
- Chronic cough and Asthma
- Recurrent chest infection<sup>[6]</sup>

**DISCUSSION**

In today's lifestyle GERD is the most prevalent disease in gastrointestinal diseases. GERD is a more harmful disease that causes esophagitis and heartburn chest pain. Esophagitis causes dysphagia and it results in weight loss. GERD causes Barrett's esophagus, a pre-malignant condition. Severe GERD results in ulcerations at the lower end of the esophagus, causing reflux esophagitis.

**OBESITY** – It increases intra-abdominal pressure and results in reflux of gastrointestinal content. So weight loss decreases intra-abdominal pressure, relieving symptoms.

**PREGNANCY** – It increases intra-abdominal pressure and results in reflux of gastrointestinal content. After delivery, symptoms are relieved due to decreased intra-abdominal pressure.

**DIETARY FAT, CHOCOLATE, ALCOHOL, TEA AND COFFEE** – Relax the lower esophageal sphincter; it results in gastro-duodenal contents refluxing into the esophagus, so dietary changes are needed.

After a meal, lying down in a position results in reflux of gastro-duodenal content, causing reflux esophagitis.

**CONCLUSION**

Gastro-intestinal reflux disease is a persistent affection of the upper part of the gastrointestinal tract with growing prevalence throughout the world. It occurs when gastro-duodenal contents reflux into the esophagus, causing erosion and ulceration at the lower end of the esophagus, leading to esophagitis. In today's lifestyle, an etiopathological study of GERD is essential for treatment. Due to a luxurious but busy lifestyle of working people, GIT disorders have become the most common illness. Lifestyle advice should be given, including weight loss, avoidance of dietary items, elevation of the bed head in those who have nocturnal symptoms, avoidance of late meals, and cessation of smoking.

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