Difference Between GERD and Acid Reflux

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Key Difference – GERD vs Acid Reflux

Acid reflux and GERD (Gastro esophageal reflux disease) are two related conditions. *Acid reflux is the backflow of the gastric acids into the esophagus.* When this condition progresses into a more advanced stage where there is a significant level of gastric acid reflux into the esophagus that condition is identified as GERD. Thus, the key difference between GERD and acid reflux is their severity.

What is Acid Reflux?

Gastric acids can regurgitate into the lower esophagus due to various reason. This can happen to any person and is not regarded as a pathological condition.

What is GERD?

Gastro esophageal reflux disease (GERD) is due to the reflux of the gastric content into the lower esophagus. Although the reflux of acidic gastric content is a common phenomenon which occurs in almost everyone, the weakening of the gastro esophageal sphincter increases the amount of gastric reflux to a significant level that ultimately results in GERD.

GERD has been recognized as a lifestyle related disease that is commonly seen among people who have adopted a “Western type” life style.

Risk Factors

- High fat and low fiber diet
- Sedentary lifestyle
- **Obesity**
- Smoking

Repeated exposure to gastric acids damages the esophageal mucosa and the damaged cells are replaced by regeneration. This increases the risk of esophageal adenocarcinomas.
Symptoms

- Typical symptoms – heart burn, regurgitation
- Atypical symptoms – abdominal pain, chest pain, chronic cough, hoarseness, asthma, post nasal drip

In some occasions, it is possible to have asymptomatic GERD where the patient does not have any symptoms in spite of the ongoing damage to the esophageal mucosa.

Diagnosis

The reflux of the acid into the lower esophagus is measured objectively by placing a pH probe at the lower end of the esophagus. The measurements are taken over a period of 24 hours. The function of the lower esophageal sphincter is assessed by...
manometry. In the case of an atypical presentation, it is necessary to exclude other possible causes such as ischemic heart diseases.

**Reflux Related Changes in the Squamous Epithelium**

The squamous epithelium of the esophagus is inflamed as a result of the repeated exposure to the gastric acids. Basal cell hyperplasia and intraepithelial eosinophils are the characteristic microscopic features. Severe inflammation can give rise to erosions and ulcerations.

**Complications**

- **Short Term**

Esophagitis – lesions differ depending on the degree of inflammation. The presence of ulcerations and erosions can manifest as melena or hematemesis. Healing of ulcers by fibrosis can produce strictures around the esophageal sphincter limiting its contractility.

- **Long term**

Esophagitis

\[ \downarrow \]

Cardiac type glandular metaplasia

\[ \downarrow \]

Intestinal type metaplasia (Barrett esophagus)

\[ \downarrow \]

Glandular dysplasia

\[ \downarrow \]

Adenocarcinoma

A biopsy is essential to diagnose Barrett’s esophagus. The presence of Barrett’s esophagus increases the risk of adenocarcinomas exponentially.

**Endoscopic Appearance of GERD**

- Usually, the inflamed mucosa appears erythematous and edematous. With severe inflammation, it is also possible to have erosions and ulcers. Healed ulcers can produce strictures.
- When glandular metaplasia occurs, the squamous epithelium appears pale pink and the intervening columnar epithelium appears velvety.

**What are the similarities between GERD and Acid Reflux?**

- Reflux of the gastric acids into the lower esophagus is the underlying reason for GERD and acid reflux.

**What is the difference between GERD and Acid Reflux?**

<table>
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<th>GERD vs Acid Reflux</th>
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<tbody>
<tr>
<td>Extensive regurgitation of the gastric acids into the lower esophagus above a certain significant degree</td>
<td>Acid reflux is the regurgitation of the gastric acid. It is the backflow of the gastric acids into the esophagus.</td>
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<tr>
<td>Pathological Condition</td>
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**Summary – GERD vs Acid Reflux**

Acid reflux has become an extremely common condition nowadays. Not adhering to a daily exercise plan, sedentary and busy lifestyle along with the fast food that people are vastly consuming have contributed to the increased incidence of this condition. When this condition progresses into a more advanced stage where there is a significant level of gastric acid reflux into the esophagus that condition is identified as GERD. This is the difference between GERD and acid reflux.

**References:**


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