

Esophageal Stricture Mimmicking Schatzki Ring

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Abstract

Introduction Schatzki–Gary ring is a narrowing of the lower oesophagus that can cause difficulty swallowing (dysphagia). The ring is named after the German-American physician Richard Schatzki. A peptic stricture at the gastroesophageal (GE) junction, also known as the squamocolumnar junction, is a narrowing of the oesophagus caused by chronic acid reflux and resulting scar tissue, often leading to dysphagia. Both these entities can rarely mimic each other and lead to diagnostic dilemma.

Case report- A forty five-year-old female, a known case of dysphagia, was dilated endoscopically, one year back but lost all her medical records. She remained asymptomatic in between and now again developed gradually progressive dysphagia for last two months. Repeat endoscopy revealed a very tight ring like structure with pin - point opening which was thought to be Schatzki ring and dilated partially with endoscope in first sitting. After that patient was reviewed after ten days and reported partial improvement in dysphagia. At this point of time, barium swallow was done which revealed stricture at lower end of oesophagus at GE junction. Patient underwent second session of endoscopic dilatation which led to complete dilatation of stricture and associated sliding hiatal hernia was identified. Patient was put on proton pump inhibitor and prokinetics and was seen on follow up after two weeks, her dysphagia has completely resolved. She was advised life style modifications and asked to report on priority, if dysphagia redeveloped.

Conclusion- Dysphagia is a very common entity which is dealt by gastroenterologist on daily basis. Endoscopy helps in rapid and accurate diagnosis as well timely treatment, including biopsies and dilatation. Sometimes, diagnostic dilemmas may occur which should be wisely dealt by good clinical history, presentation and supportive investigations like barium swallow.

Keywords- Schatzki ring, Peptic Stricture, Dysphagia, Endoscopy, Barium swallow

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I. Introduction

A Schatzki ring is a ring-like structure formed by the mucosa and submucosa of the oesophagus, located in the distal part of the oesophagus, just above the gastroesophageal junction. Endoscopically, it appears as a thin, membranous, circumferential ring. The narrowing is caused by a ring of mucosal tissue (which lines the oesophagus) or muscular tissue [1]. The ring is typically found at the squamocolumnar junction, where the squamous epithelium of the oesophagus transitions to the columnar epithelium of the stomach. Schatzki rings are often associated with hiatal hernias. Many people with Schatzki rings are asymptomatic, but some experience intermittent, episodic, nonprogressive dysphagia (difficulty swallowing) to solids or, more seriously, a completely blocked oesophagus. Schatzki rings can be identified through radiology (GI series or barium swallow studies) or endoscopy. Treatment options include dilation or bougienage (using a balloon or bougie to stretch the ring). There are three main types of esophageal rings: A rings, B rings (Schatzki rings), and C rings [2]. A ring are uncommon and develop above the junction between the stomach and oesophagus. B rings (Schatzki rings) are the most common type of esophageal rings that can develop and appear in the lower end of the oesophagus, just above the junction between the stomach and the oesophagus [3]. C rings are the least common type of esophageal ring and form below the junction between the stomach and the oesophagus. A peptic stricture at the gastroesophageal (GE) junction, also known as the squamocolumnar junction, is a narrowing of the oesophagus caused by chronic acid reflux and resulting scar tissue, often leading to dysphagia [4]. Peptic strictures occur at GE junction and are a consequence of chronic gastroesophageal reflux disease (GERD), where stomach acid frequently irritates and damages the lining of the oesophagus. The repeated exposure to acid causes inflammation and scarring, which can lead to the narrowing of the esophageal lumen (the opening). The primary symptom is dysphagia, or difficulty swallowing, which may feel like food getting stuck in the throat or chest. Diagnosis often involves a combination of tests, including a barium swallow for outlining oesophagus, endoscopy and potentially esophageal manometry. The chronic acid reflux is the primary risk factor and others are hiatal hernia, impaired esophageal motility and elderly patients. The treatment includes medical therapy with proton pump inhibitors (PPIs) &

prokinetics and if the stricture is causing significant dysphagia, endoscopic dilation may be necessary. In rare cases, especially if dilation is ineffective or frequent, surgery (esophagectomy) might be considered. Long term life style modifications are required like avoiding certain foods and drinks that can trigger reflux, maintaining a healthy weight, and avoiding smoking can help manage GERD and prevent stricture recurrence.

II. Case Report

A fourty five-year-old female, a known case of dysphagia, was dilated endoscopically, one year back but lost all her medical records. She remained asymptomatic in between and now again developed gradually progressive dysphagia for last two months. Repeat endoscopy revealed a very tight ring like structure with pin - point opening which was thought to be Schatzki ring and dilated partially with endoscope in first sitting.



Figure 1- Endoscopic View of Stricture



Figure 2- Stricture on Barium Swallow



Figure 3- Dilated Stricture after Endoscopic Dilatation

After that patient was reviewed after ten days and reported partial improvement in dysphagia. At this point of time, barium swallow was done which revealed stricture at lower end of oesophagus at GE junction. Patient underwent second session of endoscopic dilatation which led to complete dilatation of stricture and associated sliding hiatal hernia was identified. Patient was put on proton pump inhibitor and prokinetics and was seen on follow up after two weeks, her dysphagia has completely resolved. She was advised life style modifications and asked to report on priority, if dysphagia redeveloped. In our case there was diagnostic dilemma between peptic stricture and Schatzki ring was due to initial prescence of pin -point opening mimicking like a ring on first endoscopy, in background of non-availability of previous medical records. The gradually progressive dysphagia in our case is usually seen in stricture in comparison to Schatzki ring in which usually intermittent dysphagia is seen. Second thing was this pin-point opening was very resistant to dilatation of scope which is usually not seen in Schatzki ring and occurs rarely if muscular layer is also involved, in addition to mucosa and sub mucosa. This type of stiff resistance to endoscopic dilatation is commonly seen in strictures. Thus, in first sitting partial dilatation was done and once bleeding started, procedure was rightly stopped. For reconfirming the diagnosis, Barium swallow was done which revealed it to be stricture which was dilated endoscopically in next sitting. Once, stricture was successfully dilated, the sliding hiatus hernia in immediate proximity of stricture was appreciated and rest stomach and duodenum were found to be normal.

III. Conclusion

Dysphagia is a very common entity which is dealt by gastroenterologist on daily basis. Endoscopy helps in rapid and accurate diagnosis as well timely treatment, including biopsies and dilatation. Sometimes, diagnostic dilemmas may occur which should be wisely dealt by good clinical history, presentation and supportive investigations like barium swallow. An endoscopist should not only know what to do but also when to do, how much to do and what not to do.

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