

# Schatzki's Ring: Two Cases with Mid-Esophageal Location

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## Abstract

*The Schatzki's ring is a narrow annular stricture that radiographically appears as a circumferential membrane or web projecting into the lumen at right angle to the long axis of the lower part of the esophagus. This report presents two cases of Schatzki's ring situated almost mid-esophagus, far proximal from the usual location at the squamo-columnar junction. Such rings in a mid-esophageal location have not previously been reported in the literature.*

**Key words:** Schatzki's ring, esophageal webs, bouginage.

## Introduction

A distal esophageal web was originally described by Templeton.<sup>1</sup> Schatzki and Gray<sup>2</sup> and Ingelfinger and Kramer<sup>3</sup> were the first to attribute symptoms to this lesion. Later Schatzki and Gray<sup>4</sup> described their further experiences with this disease entity. Many patients may be asymptomatic<sup>5</sup> but dysphagia almost invariably occurs when the ring diameter is 13mm or less. These rings involve only the mucosa and submucosa and not the esophageal smooth muscle. Microscopically, squamous epithelium covers the upper surface of ring and the columnar epithelium covers the lower surface.<sup>6</sup> In all of the cases reported so far, the ring is situated at the esophagogastric junction above a sliding hiatal hernia.

## Case Histories:

Two Kashmiri patients, a 47 year old male and a 51 year old female, presented with intermittent dysphagia of 3 and 5 years duration, respectively. A general physical examination revealed no significant findings. A barium esophagogram demonstrated

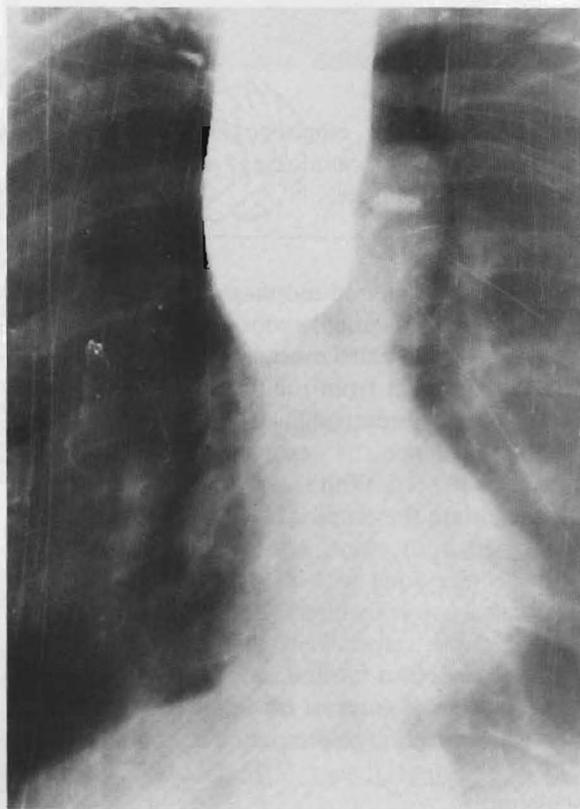


Figure 1. Barium esophagogram showing constriction in mid-esophagus.

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Figure 2. Barium esophagogram showing normally canalizing esophagus after bouginage.

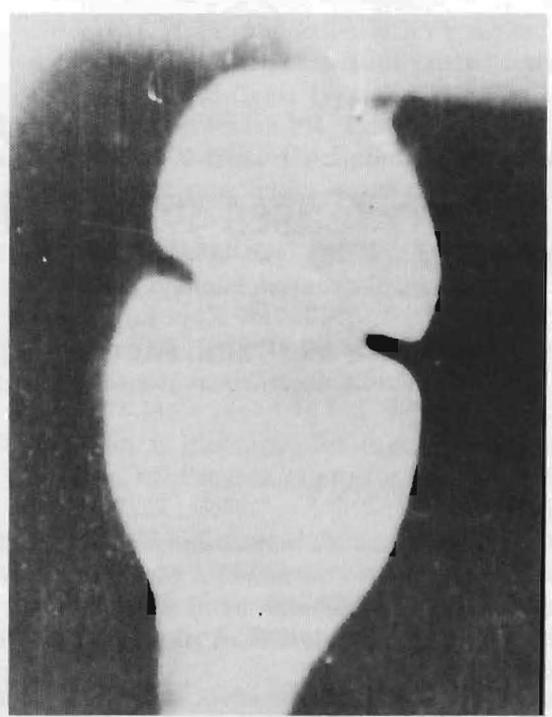


Figure 3. Usual location of Schatzki's ring at lower end of esophagus.

constriction at the mid-esophagus with very little contrast medium passing beyond the ring. (Figure 1) Esophagoscopy revealed mucosal rings at the level of 25 cm and 26.5 cm from the upper incisor tooth in the two cases, respectively. In both cases no endoscopic evidence of esophagitis or Barrett's esophagus was seen. With slight pressure it was possible to negotiate the esophagoscope beyond the constriction. In both cases, after direct visualization, bouginage was done with gum-elastic bougies, and was repeated at weekly intervals. After 5 and 4 dilatation procedures, respectively, the esophagus canalized normally. Repeat barium esophagogram revealed normal passage of contrast medium. (Figure 2) Both patients have been asymptomatic for about a year.

#### Discussion:

A review of the available literature on esophageal webs has revealed the following salient features. Upper esophageal webs are usually a part of the Plummer Vinson Syndrome.<sup>7</sup> Webs in the middle

esophagus are very uncommon.<sup>7</sup> They may be congenital or acquired as a consequence of esophagitis in association with Barrett's epithelium.<sup>7</sup> Endoscopy in these patients reveals esophagitis rather than a membranous rim of esophageal mucosa.<sup>8</sup> The Schatzki's ring has only been reported as involving the lowest portion of the esophagus.<sup>6</sup>

The present cases are the first reporting this constriction occurring at the mid-esophagus. The ring is associated with dysphagia in older people, for solids but not for liquids. Most patients with Schatzki's ring may be asymptomatic.

The etiology of this ring has been established. There has been considerable controversy as to whether a Schatzki's ring is a consequence of reflux esophagitis, a normal configuration of the gastro-esophageal junction, or radiographic evidence of a hiatal hernia. All three are likely. These are usually seen radiographically in patients with a sliding hiatal hernia. Usually they appear as annular strictures at a right angle to the long axis of the lower esophagus. (Figure 3) Differentiation of this mucosal prominence at the esophago-gastric junction from a localized peptic stricture may be difficult, as the two are usually present together with a hiatal hernia.

In the present study there was no associated hernia, peptic esophagitis or Barrett's esophagus. In both cases, repeated endoscopic bouginage gave long-lasting relief from symptoms. There was no need for pneumatic dilatation, as is recommended in

some cases<sup>9</sup> and no question of resection of the involved segment, as was in vogue in older times.

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