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## Chest Pain and Alternate Dysphagia

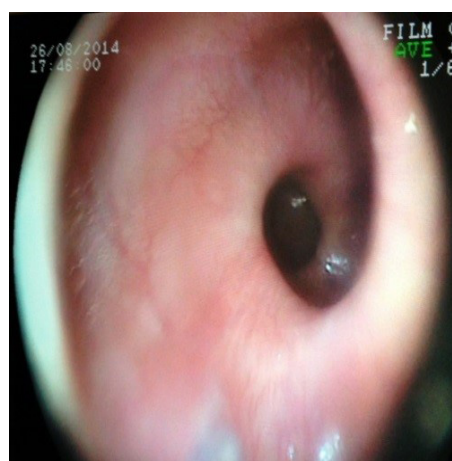
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A 67-year-old woman presented to our clinic with 5 years history of intermittent dysphasia. She described dysphasia during the intake of solid food and sometimes with liquid food. She did not note abdominal pain, hematemesis, or melena, but in the past two years, she noted a weight loss of 5 kgs. Her medical history was significant only for hypertension, which was controlled by 100 mg daily dose of metoprolol in divided doses. She occasionally took non-steroidal anti-inflammatory drug (NSAID). Physical examination did not reveal any finding.



**Fig.1:** (a) The patient's radiography with barium shows bottle opener shape, (b) and spiral lumen of the esophagus is seen in the patient's endoscopy.

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### What is your diagnosis?

#### Answer:

Upper endoscopy and barium swallow are shown in figure 1. Endoscopic finding and barium swallow revealed a corkscrew appearance (figure 1.a) together with a pronounced helical configuration of the esophageal lumen (figure 1.b). The patient underwent manometry, which indicated peristaltic contraction in the trunk of the esophagus. The intensity of contractility mostly was more than 180 mmHg. Base pressure of the lower esophageal sphincter and its loosening during swallowing was normal. Thus due to lack of simultaneous contractility and normal LES (Lower Esophageal Sphincter) there was no evidence for diffused esophageal spasm. The diagnosis was compatible with nutcracker esophagus.

### DISCUSSION

Nutcracker is considered as the most common symptoms inclusive chest pain and dysphasia in patients receiving manometry due to unknown causes.<sup>1</sup> The clinical manifestations of nutcracker esophagus included pain in the posterior side of the sternum, dysphagia, heartburn, regurgitation, dyspepsia, cough, and odynophagia<sup>2</sup> symptoms that mainly are inclusive of chest pain and dysphagia. It is also notable that there is a weak correlation between manometric findings and the clinical manifestations such as chest pain and dysphagia.<sup>3,4</sup> But it is clear that not all patients with nutcracker esophagus have chest discomfort. The patients with chest pain may have increasing visceral sensitivity. It is shown that when the intensity of the esophageal trunk wave is more than 250 mmHg, the risk of chest pain is increased.<sup>5,6</sup> To treat nutcracker esophagus, 60-90 mg diltiazem four times a day, has been shown effective.<sup>7</sup> Also trazodone 100-150 mg a day and imipramine 50 mg a day are applicable for chest pain relief in patients with esophageal motility disorder.<sup>8,9</sup> Our patient was treated with high dose proton pump inhibitors but due to lack of clinical improvement, her treatment was changed to long-acting diltiazem, which led to significant improvement in her overall health.

### CONFLICT OF INTEREST

The authors declare no conflict of interest related to this work.

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