

## Dysphagia aortica: Systematic review of a fatal disease

Mahesh Rajpoot

[Mahesh012@gmail.com](mailto:Mahesh012@gmail.com)

**Introduction:** Dysphagia is defined as a sensation of difficulty in swallowing food through the oral cavity or through the esophagus. It is classified as oropharyngeal or esophageal. Dysphagia appears more frequently in elderly patients; as many as 30–40% of residents in nursing homes are reported to experience dysphagia in some form and extent<sup>1</sup>. Dysphagia aortica is a type of esophageal dysphagia caused by the external compression of esophagus by a tortuous or an aneurysmal aorta. Though it is a rare cause of dysphagia, it should be in the differential always, as missing this diagnosis can be catastrophic. Women, elderly, short stature, hypertension and kyphosis are believed to be predisposed to the same<sup>2</sup>. We report this case to draw the clinicians' attention towards dysphagia as a possible initial presentation of aneurysm.

**Case Report:** A 59 year old African American gentleman with a history of HTN, non compliant with medications, presented with "solid food sticking in chest" for several weeks, worsening shortness of breath for 2 weeks, fever and chills. There was no c/o weight loss or anorexia, neither did he complaint of chest pain. Vitals at the time of presentation were temperature 100.6 degree F, pulse rate of 86/ min, BP 173/95, respirations rate of 18/ min and pulse ox 99% on 3 liters oxygen. On examination, he appeared comfortable. Chest auscultation revealed rhonchi on the right lower lobe with normal cardiac exam.

### Lab tests were all within normal limits.

Imaging revealed consolidation in right upper and lower lung, along with fusiform aneurysmal dilatation of ascending thoracic aorta approx. 7.5 x 6.5 cm. As the patient was hemodynamically stable, it was decided to treat the acute pneumonia and then plan for elective repair of aneurysm once recovered from acute infection. The next day, the patient had worsening respiratory status with increasing oxygen requirements and decreasing O<sub>2</sub> saturation, along with systolic BP of 200. He was taken under close monitoring in the ICU with strict BP control with nicardipine drip, when he started having chest pain. A stat ECHO revealed dissecting aortic aneurysm. The patient was immediately taken up for emergent repair of the aneurysm.

**Discussion:** Dysphagia is a rare sign of thoracic aorta aneurysm, caused by external compression of the esophagus by the dilated aorta<sup>3</sup>. It is a known clinical entity since 1932 but not many clinicians are familiar with it<sup>4</sup>. The dilated aorta compresses the esophagus laterally, leading to dysphagia. Dysphagia can also arise from compression of the esophagus by the aortic arch but this is rarely seen<sup>5,6</sup>. The treatment of dysphagia aortica varies depending on the severity of symptoms. Mild symptoms in an otherwise stable patient are usually treated conservatively with dietary habit modifications and tighter BP control. However, elective thoracic aortic repair is recommended if the aortic root or ascending aorta is greater than 5.5cm or has rapid growth of more than 0.5 cm in 1 year<sup>7</sup>.

**Conclusions:** There can be several causes of dysphagia, but unexplained dysphagia, in the right setting, should prompt the clinician to investigate further. It is an uncommon presentation of aortic aneurysm, which requires a high index of suspicion for diagnosis but it should not be missed, as the results can be fatal.

1. Lindgren, S. and Janzon, L. Prevalence of swallowing complaints and clinical findings among 50-79-year-old men and women in an urban population. *Dysphagia*. 1991; 6: 187–192
2. J.M. Wilkinson, H.A. Euinton, L.F. Smith, et al. Diagnostic dilemmas in dysphagia aortica. *Eur J Cardiothorac Surg*, 11 (1997), pp. 222–227

3. McMillan, I.K. and Hyde, I. Compression of the oesophagus by the aorta. *Thorax*. 1969; 24: 32–38
4. R. Pape. Uber einen abnormen verlauf („tiefe Rechtslage“) der meso aortischen aorta descendens. *Fortschr Roentgenstr*, 46 (1932), pp. 257–269 [in German]
5. Sang-Wook Song, Ju-hye Chung, Se-Hong Kim. A Case of Dysphagia Aortica in an Elderly Patient. *International journal of gerontology*. 2012; 6: 46-48
6. R H Pearson, E M Bessell, and N B Bowley. Compression of oesophagus by tortuous dilated aorta. *Br Med J (Clin Res Ed)*. 1981 Mar 28; 282(6269): 1032–1033
7. Chaikof EL, Brewster DC, Dalman RL, Makaroun MS, Illig KA, Sicard GA, Timaran CH, Upchurch GR Jr, Veith FJ. SVS practice guidelines for the care of patients with an abdominal aortic aneurysm: executive summary. *J Vasc Surg*. 2009 Oct;50(4):880-96.