Dysphagia lusoria in elderly: A case report

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Abstract

AIM: Late onset of dysphagia due to vascular abnormalities is a rare condition. We aimed to present a case of right subclavian artery abnormalities caused dysphagia in the elderly.

METHODS: A 68-year-old female was admitted with dysphagia seven months ago. Upper endoscopic procedures and routine examinations could not demonstrate any etiology. Multislice computed thorax tomography was performed for probable extra-esophageal lesions.

RESULTS: Multislice computed thorax tomography showed right subclavian artery abnormality and esophageal compression with this aberrant artery.

CONCLUSION: Causes of dysphagia in the elderly are commonly malignancies, strictures and/or motility disorders. If routine examinations and endoscopic procedures fail to show any etiology, rare vascular abnormalities can be considered in such patients. Multislice computed tomography is a useful choice in such conditions.

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INTRODUCTION

Dysphagia Lusoria was first described by Bayford in 1794 in a 62-year-old woman[1]. Postmortem examination of this case showed the abnormal origination of right subclavian artery from aortic arch and compression on the esophagus. Abnormalities of the thoracic aorta and great vessels are not uncommon and can result in esophageal compression and dysphagia. The most common congenital abnormality of the aorta is an isolated aberrant right subclavian artery[2]. Usually this abnormality does not lead to symptoms. However, sometimes dysphagia (dysphagia lusoria) develops. Mass effect on the esophagus can cause dysphagia. A right aortic arch with an aberrant left subclavian artery is less common but may also result in esophageal compression[3]. A pulmonary sliding occurs when an aberrant left pulmonary artery arises from the right pulmonary artery and passes between trachea and esophagus. Compression on both trachea and esophagus can occur. This abnormality can also be reliably detected with contrast-enhanced CT. We aimed to present a 68-year-old woman who had late onset dysphagia due to such a rare condition.

Dysphagia is a common problem that lowers quality of life for the elderly and a symptom that may originate from many different causes. Esophageal dysphagia could be caused by esophageal carcinoma, esophageal stricture and webs, achalasia, diffuse esophageal spasm and scleroderma, caustic esophagitis and infectious esophagitis[4]. The other rare cause of dysphagia in the elderly is vascular compression on the esophagus (Dysphagia lusoria). Based on autopsy findings, the lusorian artery had a prevalence of 0.7% in the general population[5]. Recently Fockens et al. found a prevalence of 0.4% in 1 629 patients who underwent endoscopy for various reasons[6]. Dysphagia lusoria might be seen in young adults[6], and in middle and/or elder ages as in our case[6]. Why it gives symptoms in...
elderly is not clear. Some theories have been suggested, such as increased rigidity of the esophagus itself or the vessel wall, aneurysm formation, especially in the presence of a Kommerell’s diverticulum[9], elongation of the aorta, and the combination of an aberrant artery and a truncus bicaroticus[10]. Interestingly in our patient, she had a history of dysphagia for 7 mo. She had not any lesion except minimal esophagitis in EGD. Reflux esophagitis can explain dysphagia sometimes. After the treatment of esophagitis with proton pump inhibitors (PPI), our patient’s dysphagia symptom did not relieve. The late onset of dysphagia in our patient could be explained by the changes in vertebral column. Retrosternal goitre which may be responsible for dysphagia was not found in CT. Radiopaque graphy of the esophagus could be used to show the compression of aberrant artery on esophagus, but CT scanning and/or angiography can usually confirm the diagnosis of dysphagia lusoria. Aberrant artery could be shown with multislice CT as three dimension angiographic images were non-invasive without the need of invasive angiography[11]. Here, we also presented the multislice computed tomography angiography images of the patient with a symptomatic aberrant retro-esophageal subclavian artery compression (Figure 2).

We showed the aberrant right subclavian artery abnormality and compression on the esophagus clearly. That is why we did not repeat the radiopaque graphy of the esophagus. Coronary angiography was planned but the patient refused this procedure. So the patient was referred to a cardiovascular surgeon.

In conclusion, dysphagia in an elder patient can be caused by a rare abnormality of the subclavian artery insertion. Multislice CT can reveal this abnormality.

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