Fistula between Esophagus and Subclavian Artery Caused by Foreign Body Penetration: Report of a Case

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Arterio-esophageal fistula (AEF) is an extremely rare, life-threatening complication caused by esophageal foreign body penetration. To the best of our knowledge, there have been only two cases documented in the English literature. Herein we present a 44-year-old male with neck and chest pain after a problematic ingestion of duck bone. Exsanguinating hematemesis occurred thirteen days later. Esophagoscopy revealed an esophageal mucosal tear located at 25 cm from the incisors. A left subclavian arterio-esophageal fistula at 2 cm above the root of the artery was controlled via an oblique incision on the left of the neck with upper partial sternotomy, however, the patient died the day following the surgery from multiple organ failure due to prolonged shock and massive blood transfusion.

The clinical presentation of AEF resembles that of the aorto-esophageal fistula (AoEF). The main difficulty in diagnosis and management caused by unstable clinical status and limited time available necessitates high suspicion and urgent esophagoscopy, and successful treatment requires early resuscitation, effective bleeding control, and proper surgical planning.

Key words: subclavian arterio-esophageal fistula, esophageal foreign body, hematemesis

Case Report

A 44-year-old male had impaction of duck bone during a meal, followed by left anterior chest discomfort and neck pain. There was no subsequent fever, odynophagia, or dysphagia following the incident. Studies including esophagoscopy and chest radiography were unremarkable. Thirteen days later, he presented at...