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Cervical arthrodesis penetrated into the esophagus detected by gastroscopy

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CASE REPORT

We present the case of a 76-year-old male who underwent arthrodesis due to a C7 fracture, which was complicated by an esophageal perforation and required primary surgical closure. Computed tomography (CT) was performed one month later due to dysphagia, identifying a left paratracheal collection that was drained by interventional radiology. A gastroscopy was performed due to the absence of reasonable oral intake. No alterations were found and a feeding tube was placed by percutaneous endoscopic gastrostomy (PEG). After resolution of the cervical collection and resumption of oral intake, gastroscopy was performed six months later, prior to the removal of the gastrostomy. A foreign body that imprinted on the esophageal lumen was identified in the proximal esophagus during this endoscopic procedure (Fig. 1). CT confirmed that this material penetrated the esophageal posterior wall at the level of C7 (Fig. 2). Finally, the cervical arthrodesis plate was surgically removed and the esophageal perforation was closed via a suture and sternocleidomastoid flap.

DISCUSSION

Anterior cervical arthrodesis is the treatment of choice for unstable cervical fractures; 12% of these patients have dysphagia, which is usually mild and transient due to edema secondary to manipulation (1). Esophageal perforation is a serious complication



with an estimated incidence of 0-1.6%, especially in the C5-C7 vertebral approach. This usually occurs intraoperatively or during the early postoperative period and occurs late less frequently. This condition should be suspected if dysphagia persists after a cervical surgical approach. Early diagnosis is important in order to perform an optimal treatment and avoid complications such as sepsis, mediastinitis or the involvement of large vessels (2,3).

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Fig. 1. Endoscopic image with metallic material of arthrodesis that imprinted on the esophageal lumen with adjacent normal mucosa.





Fig. 2. Computerized tomography, sagittal section of the bone. There are screws from the cervical osteosynthesis that penetrated the esophageal posterior wall at the level of C7.