

Image Article

Disappearance of the Cylindrical Cage after Anterior Cervical Discectomy and Fusion

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Case

A 64-year-old woman with a history of ossification of the posterior longitudinal ligament (OPLL) of the cervical spine and diabetes presented with progressive gait disturbance, which had been present for the past few years. The cervical OPLL was associated with severe cervical spondylotic myelopathy and was treated with combined staged laminoplasty using hydroxyapatite spacers along with anterior cervical discectomy and fusion using five cylindrical titanium cages (Figure 1A).

She had mild dysphagia and an elevated lesion observed via esophagoscopy two years after the surgery (Figure 2). However, four out of the five cylindrical cages could no longer be identified six years after the surgery (Figure 1B), and we concluded that an esophageal perforation had occurred and that the cylindrical cages had been eliminated through the intestinal tract. The patient's swallowing was normal, neurologic condition improved, and spine alignment was maintained despite the missing cylindrical cages.

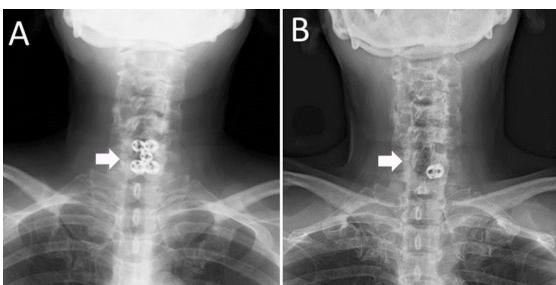


Figure 1: (A) The figure shows an antero-posterior radiograph of the cervical spine taken after the surgery, (B) Radiograph of the cervical spine 8 years after the surgery with the white arrow pointing to the missing 4 out of 5 cylindrical cages.

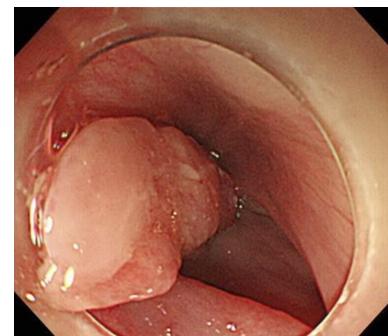


Figure 2: Upper digestive endoscopy 2 years after the surgery showing an elevated lesion of the esophagus.

Esophageal perforation due to migration of anterior cervical instrumentation is an uncommon but potentially highly morbid or even fatal complication. The rates of complications for dysphagia, esophageal perforation, and graft or hardware failure were 5.3 %, 0.2 %, and 2.1 % respectively [1]. The disappearance of the instrumentation after anterior cervical fusion has seldom been reported [2]. It has been reported that esophageal perforation may occur due to increased pressure caused by metallic implants and micro-trauma effects [3].

The complete dislodgement of anterior cervical instrumentation could occur without symptoms. Fortunately, in our patient, the sizable instrumentation might have been expelled during bowel movement causing minimal complications. Therefore, failure to achieve arthrodesis in anterior cervical fusion must be closely monitored.

Disclosure

Approval of the research protocol: N/A.

Informed consent: Written consent for the publication of this case report was obtained from the patient.

Registry and the registration no. of the study/trial: N/A.

Animal studies: N/A.

Conflict of interest: None.

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