

Unusual complication of ACDF leads to airway challenge

Dr M Kirkham MBChB FRCA, Specialty Trainee, Aberdeen Royal Infirmary
michael.kirkham@nhs.scot

Dr D Seath MBChB FRCA, Consultant Anaesthetist, Aberdeen Royal Infirmary
david.seath@nhs.scot

Background

A 73F patient presented to her GP with odynophagia, dysphagia and reduced oral intake over several weeks. She was referred to gastroenterology and upper GI endoscopy revealed a foreign body in the pharynx. This was thought to be a screw related to anterior cervical discectomy and fusion (ACDF) surgery 6 years previously.



ACDF surgery performed for degenerative disc disease and radiculopathy has a high success and low complication rate.¹ The anterior approach is considered to be direct and provides good access to the cervical spine and discs and allows multi-level surgery and fusion plates to be implanted.

This patient had been unfortunate to experience the immediate complication of pharyngeal perforation (incidence 0.25%–1.49%²) requiring repair and a critical care stay.

Pre-operative

Nasogastric feeding was commenced and she was referred to ENT for urgent assessment and removal of FB. Lateral x-ray showed anterior plate migration into the pharynx and surgery was planned for the following day.

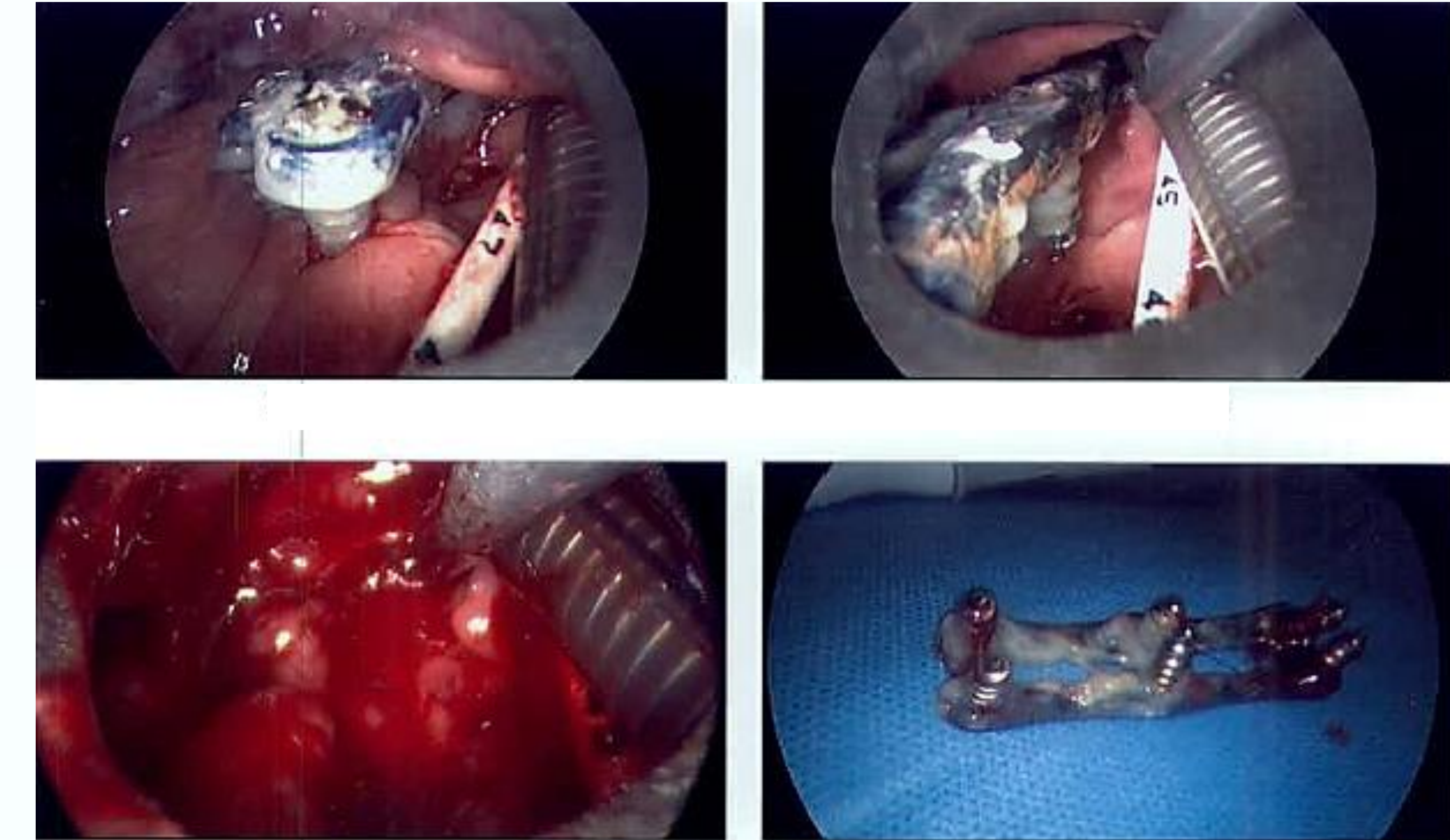


Anaesthetic Challenges

- Pre-existing c-spine disease
- Foreign body
- Potential haemorrhage
- Risk of damage to ETT/cuff
- Shared airway

Management

An awake fibre-optic nasal intubation was conducted with the patient sitting up, nasal oxygen, remifentanyl sedation and topicalisation of the airway. The cervical plate was visualised in the pharynx and it was possible to bypass with the fibrescope but a 6mm ID nasal tube was unable to pass the FB to reach the trachea. A second attempt was made with a 6mm LMA® Fastrach™ ETT which was successful and GA was induced. The plate and screws were retrieved from the soft tissue of the pharynx by the ENT surgeons and haemostasis was achieved with adrenaline soaked patties. Nasogastric feeding was recommenced and there were no complications in the patient's recovery.



Discussion

There are documented immediate and early complications of ACDF which can affect the airway; haemorrhage, acute airway obstruction, recurrent laryngeal nerve palsy and dysphagia but such delayed presentations appear to be rare in the literature.³

In this case it was difficult to establish a safe airway and care had to be taken not to dislodge the FB whilst doing so. The reinforced ILMA ETT proved to be useful in a successful AFOI. The use of this is a recommendation in the DAS guidelines for awake tracheal intubation as a type of tube to have been shown to be “superior to standard tracheal tubes in terms of ease of tracheal intubation, railroading and decreasing laryngeal impingement”.⁴

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