Diagnosis of vertebral canal haematoma by myelography and spiral computer tomography in a patient with an implantable cardioverter-defibrillator contraindicating magnetic resonance imaging

Editor—We report a case of a large vertebral canal haematoma (VCH) after the insertion of a thoracic epidural catheter in a 78-yr-old man. The patient presented for a laparoscopic sigmoid colon resection at Luebeck University Hospital, Germany. The patient had suffered a myocardial infarction in 2004 after which he received an implantable cardioverter-defibrillator. In addition, he was being treated for hypertension and diabetes mellitus type 2. The evening before surgery deltaparin 5000 IE was administered s.c. at 20:00 h. Before induction of anaesthesia, a thoracic epidural catheter was inserted at the T9/10 interspace with the patient sitting. Sufentanil 20 μg was injected into the epidural catheter and on commencing the operation, an epidural pump was started administering ropivacaine 0.2% at 6 ml h⁻¹. After uneventful surgery, the patient had normal lower limb motor function. At midnight, the patient received his first postoperative dose of deltaparin 5000 IE s.c., and at 04:00 h (postop day 1), he complained that he was unable to move his legs. The anaesthetist on call stopped the patient-controlled epidural analgesia (PCEA) pump and 3 h after that the motor block disappeared. The PCEA pump was then restarted at a reduced rate of 4 ml h⁻¹. During the morning of the second postoperative day, he developed a motor weakness of the right thigh. At 15:00 h, a neurological consult ruled out peripheral nerve damage and at 18:00 h radiological investigation was started. Owing to the implanted automated cardioverter-defibrillator, magnetic resonance imaging (MRI) was withheld, but a high definition spiral computer tomography (CT) did not reveal any pathology. Hence, a conventional, ascending myelography was undertaken which showed a significant bilateral narrowing of the contrast dye at level T6 to T10. The post-myelographic CT confirmed the suspected VCH ranging from T5/6 to T10/11 with complete compression of the subarachnoid space at level T7 to T9 (Fig. 1). At 22:00 h, the patient underwent emergency decompression laminectomy. After 3 weeks, all neurological symptoms had subsided.

The low incidence of major complications after central neuraxial block has just been confirmed by a large national audit project.¹ The major issue leading to permanent patient harm in the past has been delay in the diagnosis, drainage of a haematoma, or both, as recently reviewed.² Notably, at present, there is a debate whether or not implanted cardiac devices prove a contraindication for MRI scanning³ and a safety protocol for non-cardiac and cardiac MRI in these patients has been proposed.⁴ However, if it has been decided that MRI scanning is unsafe for the patient, even a high definition spiral CT may be unable to detect even large VCHs and only conventional myelography with consecutive CT scanning will establish a diagnosis. In our case, the reduction of the PCEA infusion rate on the first postoperative day primarily led to a significant reduction in the motor block, which reoccurred on the second postoperative day. The neurological consultation and the radiological imaging took a considerable amount of time, before the patient finally underwent emergency decompression laminectomy. Despite that time

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Fig 1 Post-myelography CT confirms a VCH (H) ranging from T5/6 to T10/11, the air bubble within the haematoma might derive from epidural catheter injections.
Incidental recognition of an aspirated tablet in an oesophagectomized patient

Editor—We report an incidental recognition of silent aspiration of a tablet given before operation during routine fibreoptic inspection of the double-lumen tube position in a patient with a previous oesophagectomy.

A 64-yr-old woman presented with a carcinoma of the middle oesophagus. An abdomino-thoracic oesophagectomy was combined with the gastric pull-up technique. Two months after the primary intervention, the patient required surgical treatment of a persistent chylothorax. On the day of operation, the patient received her oral medication (including diclofenac 50 mg) without any sedatives. No opioids had been given in the previous 48 h. A rapid-sequence induction was performed and the trachea was intubated with a 37 F left-sided double-lumen tube. The correct positioning of the tube was verified by bronchoscopy and incidentally, a tablet was recognized in the right main bronchus. The tablet was too large to be extracted by suctioning it into the tracheal tube. Although many approaches to remove endobronchial foreign bodies have been described (like rigid or flexible bronchoscopy assisted by wire baskets, bronchoscopic forceps, Fogarty balloon catheters, and fluoroscopic guidance of instruments), they often require special instruments and skills. The smooth and fragile consistency of a moist tablet is at risk of disintegration and dispersion into the bronchial tree. Thus, extraction of a tablet by suctioning it into the tracheal tube is a simple and immediately available approach, which does not require special skills or instruments. The risk of accidental endobronchial injury is reduced in the absence of potentially hazardous instruments like endoscopic forceps, baskets, or Fogarty catheters. In addition, the tablet is secured inside the tube while retrieving it through the trachea, glottis, and pharynx avoiding the loss or disintegration of the tablet. This technique of retrieving a foreign body ‘en bloc’ with the tube has already been described, but only in combination with complex instruments like baskets or forceps. This case demonstrates the possible risk of silent aspiration of solid foreign bodies after oesophagectomy even months after the initial operation. Furthermore, the presented procedure to remove a fragile foreign body without the risk of unintended disintegration as described in this case appears to be a feasible, simple, and safe technique.

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doi:10.1093/bja/aep156