



this would have given an indication of where the problem lay. Although unfortunate, this incident is not a fault in the display design, but really a problem with the working environment around the anaesthetic machine, in particular, with the drip stand's being pressed against the control wheel. Thank you again for bringing this to our attention.

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Complications associated with introduction of new neuraxial equipment

We read with great interest the recent editorial and paper regarding new connectors in neuraxial anaesthesia [1, 2]. Our institution recently replaced all epidural kits with a new product (Flex Tip Plus® Epidural Catheter; Arrow International UK Ltd., Uxbridge, Middlesex, UK). We had two equipment failures soon afterwards.

During transfer of a patient from the operating table to a trolley, the epidural filter and catheter looked intact; there had been no obvious traction applied to the catheter. Before transport to recovery, we noted that the catheter had sheared at a point external to the patient. In a second patient, the 20-ml Luer-slip syringe provided in the kit was filled with bupivacaine and connected to the epidural filter using minimal force. On disengaging the syringe, we noted that the tip had sheared off into the filter.

The National Patients Safety Agency's (NPSA) drive for implementing new neuraxial connectors by 2013 [3] may be in patients' best interests; however, in our department, we had two incidents with

tried and tested equipment, probably related to unfamiliarity. Introduction of new neuraxial connectors may well lead to further problems. We believe the introduction of new neuraxial equipment must be done cautiously and with active formal evaluation of adverse clinical outcomes.

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- 3 National Patient Safety Agency. *Safer Spinal (intrathecal), Epidural and Regional Devices*. <http://www.nrls.npsa.nhs.uk/resources/?EntryId45=94529> (accessed 11/01/2011).

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Equipment changes and magnetic resonance imaging compatibility

We wish to highlight the wider consequences caused by a simple equipment change made in our hospital. A patient developed severe back pain following the removal of an epidural catheter. We duly requested an urgent magnetic resonance imaging (MRI) scan to exclude an epidural haematoma. Of note, there was a

large wound extending close to the pelvis that had been closed using metal skin staples.

A new brand of skin staples (Autosuture Appose™ ULC 35W; Covidien (UK) Commercial Ltd, Gosport, Hampshire, UK) had been introduced to our hospital without communication with the anaesthetic or radiology departments. The equipment information leaflet contained no information on MRI compatibility. We contacted the manufacturer and were told that the staples were composed of steel, and categorically not MRI compatible.

This uncertainty resulted in a delay to the imaging procedure and potential haematoma evacuation. The radiologist had to make a clinical decision, balancing the risk of missing an epidural haematoma against potential complications relating to the metal staples. The scan was performed without incident.

Ferromagnetic implants are subject to a number of forces in the presence of strong magnetic fields. On the periphery of the field, they are attracted towards the centre and may be displaced in that direction. At the centre of the field, implants are subject to torque and may rotate, loosening them [1]. Implants may also be heated, in extreme cases causing burns [2]. These problems are magnified as the magnetic field strength increases.

Current guidelines from the Medicines and Healthcare products Regulatory Agency (MHRA) recommend that medical implants be classed as MR safe, MR conditional or MR unsafe in accordance with international labelling and summarised in the AAGBI guidelines in 2010 [3, 4]. The MR conditional label means that an implant is safe within a specified magnetic field strength, amongst other factors. The MHRA recommends that if there is any doubt, assume that the implant is MR unsafe [3, 5].

We later discovered (via the Internet) a manufacturer's document stating that the staples were MR