Securing tracheal tubes in facial burns

Editor—Securing the airway is a priority in any injured patient. Patients with facial burns and inhalation injury who require grafting to the face and neck area present additional challenges; facial and airway oedema, significant ventilatory requirements, and the need to avoid the use of securing tape to allow access for facial burn debridement. Techniques to secure an airway in such patients include the use of inter-dental wire fixation, which maintains the tube quite rigidly, minimizing movement, and the use of armoured cuffed oral tracheal tube (COTT).

We present a case of loss of airway when inter-dental wiring was used in association with an armoured tube. A patient with facial burns underwent skin grafting. The COTT was electively changed to an armoured TT, without complication. This COTT was fixed to his incisors via a metal wire, to secure the tube while avoiding damage to his facial skin grafts.

Movement associated with the patient waking did not result in tube displacement but rather resulted in large torsion forces, which were focused at the point of wire fixation. This in turn caused severe distortion of the armoured

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3 Ngan Kee WD, Khaw KS, Ng FF. Comparison of phenylephrine infusion regimens for maintaining maternal blood pressure during spinal anaesthesia for Caesarean section. Br J Anaesth 2004; 92: 469–74

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Anatomical causes of failed spinal anaesthesia may be commoner than thought

Editor—I read with interest the review of potential causes of failed spinal anaesthesia by Fettes and colleagues.1 I am concerned that they appear to dismiss epidural cysts too readily.

A variety of types have been described. The most common are thought to be Tarlov cysts which, with the increasing use of magnetic resonance imaging, are now estimated to be present in 4.5–9% of the adult population.2 3 Penetration of such a cyst during attempted spinal anaesthesia would be likely to produce an initial apparently normal ‘flow’ of cerebrospinal fluid, but injection of local anaesthetic would produce little or no true intrathecal spread of anaesthetic (depending on the size of the neck of the cyst) and hence inadequate or absent spinal anaesthesia. A repeat attempt at the same interspace may well re-puncture the cyst with the same effect, whereas the use of a combined spinal–epidural technique may produce no spinal anaesthetic component, but an adequate epidural spread since the cyst was not involved.

Although I would certainly agree with all the other potential causes of a failed spinal mentioned by the authors, it may well be that inadvertent puncture of a Tarlov cyst is much commoner than previously thought and may well account for all the signs and most of the occurrences of failed spinal anaesthesia.

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Use of Luer connection syringes for spinal anaesthesia

Editor—In their review, ‘Failed spinal anaesthesia: mechanisms, management, and prevention’,1 the authors discuss the potential for anterior or posterior displacement of the needle when the syringe is attached to the needle as a potential mechanism for failure of spinal anaesthesia. This is certainly the case when a bayonet connection syringe is used, as the attachment of the syringe and needle requires application of an anterior force to the former and a posterior force to the latter, which hopefully does not lead to any movement in either direction of the needle.

If a Luer connection syringe is used, the hub of the needle can be held with one hand (usually the left) applying an anti-rotational force, while the syringe is gently engaged into the hub of the needle by means of a clockwise rotational force by the other hand. It is important that...