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Cuff tears: can they be prevented?

To the Editor:

The nasotracheal route is usually utilized in patients selected for awake tracheal intubation. Damage to the nasal mucosa, the turbinates and the nasopharyngeal wall during nasotracheal intubation has been well described. Damage to the tube cuff is a frequent finding, especially when resistance is encountered during passage of the tube; this may necessitate reintubation over stiff plastics, gum bougies or woven stylets with no guarantee that the new cuff will not encounter a similar fate.

We have used a well lubricated Penrose drain, introduced into the nasal cavity, as a shield between the nasal structures and the advancing tube. An angulated forceps is used to insert the drain which is stabilized with two mosquito forceps. The endotracheal tube is inserted through the nasal cavity inside the Penrose drain (Figure).

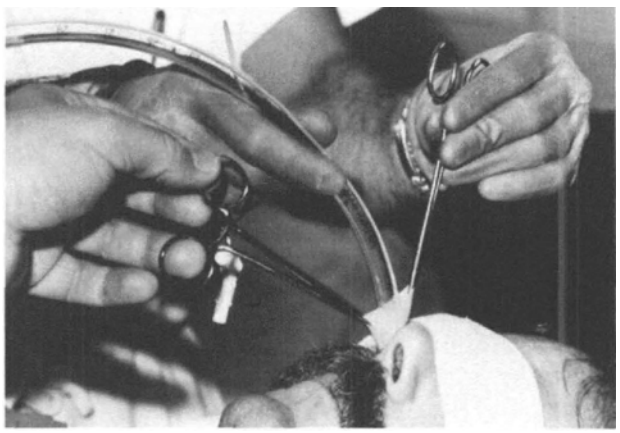

FIGURE Endotracheal tube inserted inside Penrose drain.

After successful intubation, the Penrose drain is left *in situ* and is removed, together with the endotracheal tube, at the end of the surgical procedure.

We believe that the technique is beneficial in many patients, especially those with a difficult airway.

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Pain relief in labour

To the Editor:

"Giving an anaesthetic and not seeing the patient postoperatively is like doing an experiment without bothering to read results."* Yet, so few anaesthetists see their patients after anaesthesia. Small wonder that many of our patients complain despite our "best efforts."

Obstetric anaesthesia is a special situation. Pain in labour is one of the most severe forms of pain and, moreover, it occurs in those whom we love most.[1] We started an epidural service in 1957. Recently, we evaluated the efficacy of our technique in 65 parturients. All were healthy and at term. After a test dose of 2 ml, 2% lidocaine HCl, 10 ml 0.25% bupivacaine or 10 ml 0.25% bupivacaine were injected with 1 $\mu g \cdot kg^{-1}$ fentanyl. Demographic data were collected (Table) and the patient followed by an independent observer. Assessment was by Visual Analogue Scales (VAS) 20 min after epidural initiation, and then every hour until delivery, and again between 12 to 24 hr post delivery. Our results are presented in the Figure. The group of patients receiving bupivacaine and fentanyl mixture required fewer top-ups for the first two hours after the epidural was started.

Twelve to 24 hours after delivery we asked the patients to classify the quality of their pain relief during labour, during pushing, and during delivery as excellent, very good, good, fair and poor. Ninety-eight percent of women described their pain relief as good to excellent during labour, 74% as good to excellent during pushing and 94% as good to excellent during delivery.

Our audit confirmed the clinical impression that most patients were satisfied. We encourage other anaesthetists to do similar audits. It is the simplest and best way of

*Personal communication, James Parkhouse.

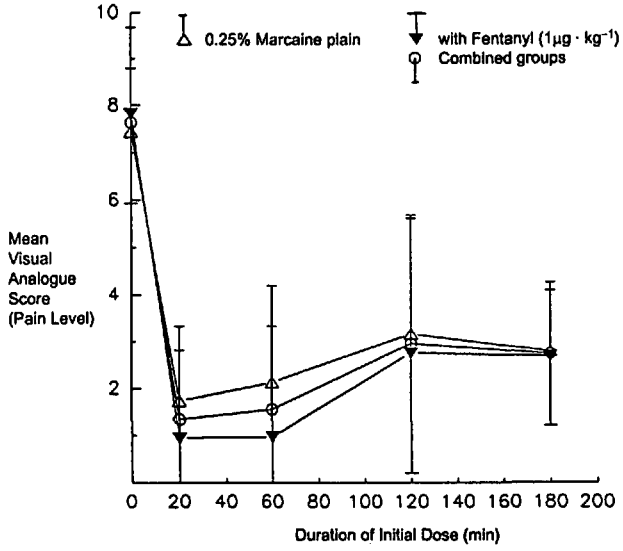

FIGURE Pain relief in labour after initial dose of epidural anaesthesia.

TABLE Patient's characteristics

Age (yr)	29.4 ± 0.8
Weight (kg)	77.9 ± 2.5
Height (cm)	165.4 ± 1.2
Parity	
– Primiparous	39 (60%)
– Multiparous	26 (40%)
Infant weight (g)	3551.8 ± 82.5
Before epidural :	
– Cervical dilatation (cm)	3.8 ± 0.3
– Range of dilatation (cm)	1–8
– Visual analogue scores (0–10)	7.6 ± 0.3

Values are mean ± SEM.

obtaining direct evaluation of the drugs and techniques that we use daily.

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Spinal anaesthesia and gravity

To the Editor:

Lui *et al.* emphasise the importance of gravity on the distribution of isobaric and hyperbaric solutions in a "sitting" model of the spinal canal.[1] *In vivo,* the situation is more complex with gravity playing a limited role, and then only with "heavy" solutions.[2,3] The posturally induced spread of previously stable analgesic levels noted with plain bupivacaine[4–6] cannot be explained by gravitational theories nor by the behaviour of solutions in spinal canal models.

There is considerable evidence that marked venous volume changes occur within the lower spinal canal (without any change in CSF pressure),[7] and these, by dis-placing CSF craniad have a major effect on the spread of intrathecal drugs.[8–10]

In his original article on the glass spine, Barker[11] implied that, in the absence of gravitational effects, the only way solutions injected at the second lumbar interspace could affect the "mid dorsal region or even higher" was "by the shifting of the whole column of cerebrospinal fluid in which it is suspended upwards." This prediction seems to have been largely ignored.

Clinically, such movements of CSF will modify significantly the effects of gravity on spinal drugs. Unless models of the spinal canal are multi-compartmental and allow for differential volume changes and fluid movement within the compartments then *in vitro* research into the mechanisms underlying the spread of intrathecal drugs will be limited and misleading.

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