

anaesthesia. A total of 14 cases has been reported in the past 50 years. We wish to report three further cases, as we believe there may have been many unreported cases.

Case 1

A 19-year-old, healthy male underwent a circumcision under general anaesthesia with a mask. No head harness or oral airway were used. The intraoperative and postoperative courses were unremarkable. The patient developed right-sided lower lip numbness which lasted for ten days, followed by complete recovery. There was no loss of motor function.

Case 2

A 48-year-old healthy female underwent general anaesthesia for a breast biopsy. A mask and oral airway were used, but no head strap. The procedure lasted 45 minutes. The intraoperative and postoperative courses were uneventful. The next day she complained of perioral numbness with weakness of the left side of her face. There was complete recovery within four weeks.

Case 3

A 58-year-old healthy male had mask anaesthesia for cystoscopy and excision of a hydrocoele. An oral airway was used, but no head strap. The procedure lasted one hour and 45 minutes. There were no intraoperative or postoperative problems. The patient complained on the second postoperative day that his lips were numb and he was unable to move the left side of his lower lip. A neurologist diagnosed facial neuropraxia affecting the mandibular branch of the facial nerve, probably secondary to compression by the face mask. Complete neurological recovery occurred within three months.

Our case reports suggest that sensory and motor deficits of the face may occur more commonly than indicated by the literature.¹⁻³ The facial nerve, after leaving the skull via the stylomastoid foramen, becomes superficial to the mandibular ramus and enters the parotid gland where it divides into its branches. The temporal and zygomatic branches run downward over or behind the ramus of the mandible where pressure may cause injury. Three anatomical variations are described.³ First, the trunk may give off its branches at varying levels in relation to the parotid gland. Second, the nerve may lie superficial rather than deep to the gland and thus the buccal branch may be injured by mask anaesthesia or use of head harness. Third, the mandibular branch sometimes runs in a lower position than usual and in this situation bends around the edge of the angle of the jaw.⁴ Pressure behind the mandible to relieve respiratory obstruction may injure the mandibular branch.

Numbness of the lower lip can be produced by pressure

exerted via the mask directly on the mental nerves bilaterally, as they pass through the mental foramina of the mandible. An oral airway may compress the inferior alveolar nerve as the nerve enters the mandibular foramen on the inner aspect of the mandibular ramus. Transient numbness of the lips and inner mouth may also occur for several hours following a mask anaesthetic if the oral airway had been lubricated with local anaesthetic.

The clinical management of these patients should consist of reassurance that they will recover completely and, while the sensory loss is present, they should be advised to avoid trauma and burns to the lips and face until the recovery of normal sensation. Recovery usually occurs within a few days to a few months.^{1-3,5}

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REFERENCES

- 1 Azar I, Lear E. Lower lip numbness following general anaesthesia. *Anesthesiology* 1986; 65: 450-1.
- 2 Glauber DT. Facial paralysis after general anaesthesia. *Anesthesiology* 1986; 65: 516-7.
- 3 Fuller JE, Thomas DV. Facial nerve paralysis after general anaesthesia. *JAMA* 1956; 162: 645.
- 4 Conway CM. Neurological and Ophthalmic Complications of Anaesthesia. In: Wylie and Churchill-Davidson's A Practice of Anaesthesia, H.C. Churchill-Davidson (ed.). Lloyd-Luke Ltd., London, 5th ed. 1984: 793-9.
- 5 Zabisch K. Paralysis of facial nerve as a complication of anaesthesia. *Anaesthetist* 1953; 2: 141-2.






Pseudo-embolie Drum-Cartridge Catheter

Monsieur l'éditeur en chef,

Nous aimerions attirer votre attention sur l'utilisation du cathéter pour voie centrale Drum-Cartridge® Catheter (Abbott Ireland Ltd.). Vous remarquerez sur l'emballage du Drum-Cartridge® Catheter (Figure) la dimension suivante: 71 cm. Après vérification de dix cathéters, nous observons que ceux-ci varient entre 71 cm à 73 cm. Lorsque vous retirez un Drum-Cartridge Catheter d'un patient, comment pouvez-vous être assuré qu'il ne manque pas 2 cm de ce cathéter, et que celui-ci n'a pas provoqué d'embolie pulmonaire? Nous proposons d'ajouter


No. 4719

Drum-Cartridge® Catheter

Needle Aiguille Aguja	Kaniula Kanüle Kanyl				Catheter Catetero Katheter		
Radiopaque I.V. Catheter Catheter radio-opaque Röntgenfahiger Katheter Cateter radiopaco Catetero Radiopaco Radiopaque Catheter Röntgantät Kateter	Sterile Stérile Steril Estéril Sterile Steriel Steril	5.1 cm	2.1 mm	1.8 mm	Needle and Catheter Non-pyrogenic Aiguille et catheter apyrogènes Kanüle und Katheter pyrogenfrei Aguja y cateter alogénicos Ago e catetero alogénico Naald en catheter zijn pyrogeen-vrij Kanyl og kateter är pyrogenfria	71 cm	1.1 mm

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FIGURE Remarquer la dimension du cathéter sur l'emballage, soit 71 cm. / Package with catheter length indicated as 71 cm.

au bout distal de ce cathéter un marqueur pour nous confirmer l'intégrité de celui-ci lors de son retrait.

To the Editor:

We would like to draw your attention to the use of the central venous Drum-Cartridge® Catheter (Abbott Ireland Ltd.). The package of the Drum-Cartridge® Catheter (Figure) includes the following dimension: length 71 cm. We examined ten catheters and found their length to vary from 71 cm to 73 cm. While withdrawing this catheter from the patient, how could one be sure that it is not missing 2 cm, which could become a pulmonary embolus? We propose the addition of a mark at the tip of the catheter to allow confirmation of its integrity after withdrawal.

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Epinephrine test dose is not warranted for confirmation of intravascular migration of epidural catheter in a parturient

To the Editor:

We strongly object to the recommendation by Eldor *et al.*¹ that epinephrine alone be used when testing for the accidental intravenous placement of an epidural catheter.

The authors presented the case of a parturient who, two hours following institution of an uneventful epidural block, complained of ringing in the ears when a top-up dose of 5 ml of 0.5 per cent bupivacaine was injected. Administration of another dose of only 2 ml of the anaesthetic elicited the same reaction. However, aspiration of the catheter failed to yield blood and, therefore, three doses of 10 µg of epinephrine were injected to "prove the point." The injection of epinephrine under these circumstances is unwarranted and unsafe, for the following reasons.

First, ringing in the ears subsequent to an injection of local anaesthetic is virtually always diagnostic of entry into the bloodstream. Second, blood is often not obtainable by either aspiration or free flow, as the catheter lumen is small while blood is viscous. Third and most importantly, intravascular administration of even small doses of epinephrine into pregnant sheep and guinea pigs has been shown to reduce uterine blood flow for periods longer than the maternal cardiovascular effects.^{2,3} Furthermore, when 3 ml of saline or 15 µg of epinephrine in 3 ml of saline were injected intravenously in a random fashion in 20 unanaesthetized healthy parturients in active labour, "fetal distress" developed in two of the patients who received epinephrine but in none receiving saline; decreased uterine blood flow was suspected as the cause of the temporally related fetal heart rate abnormalities.⁴

Intravenous placement of an epidural catheter can be proven with complete safety for the fetus by comparing the reaction to an injection of saline with that of a local anaesthetic with low cardiotoxic properties.

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