Correspondence

Rare complication after Stellate ganglion block

To the Editor:

A case is reported of suspected inadvertent subdural block following attempted stellate ganglion block (SGB). A 56-yr-old man was suffering from right shoulder and neck pain. He obtained a good degree of pain relief for three days with SGB. On one occasion, C6-SGB was performed with 6 ml mepivacaine 1%. The aspiration test was negative. Twenty minutes after SGB, he reported heaviness in the left leg, followed by the right leg and left hand. Hypoaesthesia was observed from C2 to T7, and below T12 levels by pin prick test. He could not move either leg or his left hand 50 min after SGB. When he eventually recovered from the motor block two hours after SGB, a 20 sec clonic, systemic convulsion (just like shivering or continued fasciculation) from his face to both legs was observed every 10 min. He could answer questions at all times. The convulsion was temporarily relieved by administration of 5 mg diazepam *iv* twice, then administration of 250 mg of phenytoin *iv* stopped the convulsion completely. After four hours, he recovered fully without any complications. Brain CT, electroencephalogram and cerebral angiography showed no abnormalities.

Subdural block is a very rare complication of SGB.¹ The clinical characteristics of subdural block are a negative aspiration test, delayed onset, widespread sensory block, variable motor blockade.² The MMPI test³ indicated neurosis. We consider that he had anxiety after sensory and motor paralysis because of subdural block following SGB, and hysteria lead to convulsions.⁴

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REFERENCES

- 1 Bruyns T, Devulder J, Vermeulen H, De Colvenaer L, Rolly G. Possible inadvertent subdural block following attempted stellate ganglion blockade. *Anaesthesia* 1991; 46: 747-9.
- 2 Lubenow T, Keh-Wong E, Kristof K, Ivankovich O, Ivankovich AD. Inadvertent subdural injection: a complication of an epidural block. *Anesth Analg* 1988; 67: 175-9.
- 3 Cox GB, Chapman CR, Black RG. The MMPI and chronic pain: the diagnosis of psychogenic pain. *J Behav Med* 1978; 1: 437-43.
- 4 Kaplan HI, Sadock BJ, Grebb JA. Cognitive disorders and mental disorders due to a general condition. *In*: HI Kaplan, BJ Sadock, JA Grebb (Eds.). *Kaplan and Sadock's Synopsis of Psychiatry, Behavioral Sciences, Clinical Psychiatry*. Baltimore: Williams & Wilkins Co., 1994: 364-7.

The LMA for the application of postoperative CPAP

To the Editor:

We have used the reinforced laryngeal mask airway (RLMA) for application of continuous positive airway pressure (CPAP) support in two patients suffering hypoxia during recovery from anaesthesia. Both were obese (92 kg, 112 kg) with mild sleep apnoea and required general anaesthesia for corrective surgery to their upper airway; septoplasty and uvulopalatoplasty respectively. Anaesthesia was induced with propofol, fentanyl and vecuronium. An RLMA was inserted and a 20° head-up position adopted. Intermittent positive pressure ventilation was satisfactory with peak airway pressures of 18 cm H₂O. Anaesthesia was maintained with N₂O/O₂/isoflurane. After an uneventful perioperative course neuromuscular blockade was reversed and spontaneous respiration allowed. Both patients became desaturated (SpO₂ < 88% and < 85%) in spite of receiving 15 L·min⁻¹ oxygen via a T-piece. Substitution with a Whisperflow system providing CPAP of 5 cm H₂O and 40% O₂ produced rapid, sustained improvement in saturation (SpO₂ 96% and 99%). The RLMA was removed by the patients when awake.

Use of the RLMA for ENT surgery provides an unobstructed easily maintained airway protected from soiling perioperatively and, if left in situ, throughout the recovery period until full return of upper airway reflexes.¹⁻³ Recovery is less eventful than if an endotracheal tube were left in situ or exchanged for a Guedel airway.²⁻³ The RLMA also allows immediate application of CPAP as soon as spontaneous ventilation returns with