Hormis l'article de Sia et coll.,[4] qui traite de la mobilisation chez le patient jeune atteint d'une fracture de la diaphyse fémorale, nous n'avons retrouvé aucun article sur le sujet de la mobilisation d'un patient âgé atteint d'une fracture pour réaliser une rachianesthésie. Enfin, les médicaments autres que le propofol suggérés par le Dr Errando (kétamine, fentanyl, et midazolam) sont moins adaptés car ils ont un délai et une durée d'action plus longs, et peuvent entraîner des effets secondaires, voire des complications chez ces patients fragiles.

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Références

1 *Sinclair S, James S, Singer M.* Intraoperative intravascular volume optimisation and length of hospital stay after repair of proximal femoral fracture: randomised controlled trial. BMJ 1997; 315: 909–12.
2 *Minville V, Castel A, Asehnoune K, et al.* Le propofol pour réaliser une rachianesthésie en position latérale chez les victimes d'une fracture du fémur. Can J Anesth 2006; 53: 1186–9.
3 *Minville V, Fourcade O, Grousset D, et al.* Spinal anesthesia using single injection small-dose bupivacaine versus continuous catheter injection techniques for surgical repair of hip fracture in elderly patients. Anesth Analg 2006; 102: 1559–63.
4 *Sia S, Pelusio F, Barbagli R, Rivituso C.* Analgesia before performing a spinal block in the sitting position in patients with femoral shaft fracture: a comparison between femoral nerve block and intravenous fentanyl. Anesth Analg 2004; 99: 1221–4.

Electroconvulsive therapy-induced asystole: occurrence after 39 previous uneventful treatments

To the Editor:

Asystole (defined as an absence of heartbeat for five or more seconds) is an unusual but increasingly recognized complication of electroconvulsive therapy (ECT) in older patients.[1,2] We recently provided care for a 73-yr-old man with major depression including psychotic and catatonic features who was admitted for outpatient ECT. The patient had undergone a series of 39 previous uncomplicated ECTs under general anesthesia over the previous six months, and had experienced an excellent clinical response. The patient was treated with maintenance ECT on a weekly basis, and also received chronic oral venlafaxine (300 $mg \cdot day^{-1}$ in divided doses) and aripiprazole (30 $mg \cdot day^{-1}$ in divided doses) therapy. Sodium thiopental (dose range of 1.5 to 2 $mg \cdot kg^{-1}$) and succinylcholine (1 to 1.5 $mg \cdot kg^{-1}$) were used for anesthesia, and labetalol (10 to 20 mg) or esmolol (50 to 100 mg) were used to control sympathetic nervous system stimulation during most of the previous treatments. The patient also had a past history of coronary artery disease, poorly controlled essential hypertension, and hyperlipidemia treated with oral enteric aspirin (325 $mg \cdot day^{-1}$), clopidogrel (75 $mg \cdot day^{-1}$), isosorbide mononitrate (30 $mg \cdot day^{-1}$), lisinopril (20 $mg \cdot day^{-1}$), and simvastatin (80 $mg \cdot day^{-1}$). A preoperative electrocardiogram indicated normal sinus rhythm with occasional premature ventricular contractions, voltage criteria for left ventricular hypertrophy, and nonspecific T wave abnormalities. These findings were stable, and no conduction abnormalities were present. The serum potassium concentration was 4.4 $mEq \cdot L^{-1}$. The remainder of the laboratory analysis was normal.

In anticipation of a hyperdynamic cardiovascular response to ECT, preoperative hypertension was treated with labetalol (20 mg *iv* in divided doses). Anesthesia was induced using sodium thiopental 2 $mg \cdot kg^{-1}$ *iv* and succinylcholine 1 $mg \cdot kg^{-1}$ *iv* after placement of transcutaneous bilateral cranial electrodes. An oral airway was placed, positive pressure ventilation by mask was begun using 100% oxygen, and ECT was induced (95% energy; total delivered charge of 479 mCoulomb; total seizure duration of 35 sec). Asystole was noted on the continuous electrocardiogram concomitant with the loss of the pulse oximetry and capnography signals immediately after the onset of the electrical stimulus. Radial and carotid arterial pulses were absent, chest compressions were initiated, and atropine (0.6 mg *iv*) was administered. Ventricular bigeminy was observed almost immediately after chest compressions were begun, lidocaine 100 mg *iv* was administered, and normal sinus rhythm was restored. The asystole was approximately ten seconds in duration. Arterial blood gas analysis and serum electrolyte concentrations obtained after the episode were normal. The patient emerged from anesthesia without difficulty and was drowsy but easily aroused during the first 20 min after the procedure. His vital signs remained stable. No additional episodes of asystole, bradycardia, or ventricular ectopy were observed. A postoperative electrocardiogram revealed no interval changes from previous studies. A cardiology consultant indicated that no further evaluation was required and recom-

mended conservative management. The patient was observed for several hours in the recovery room, his cardiovascular status was unchanged, and he was discharged from the hospital later that day. No additional episodes of asystole or bradyarrhythmias occurred during weekly ECT treatments over the following several months. The clinical presentation of our patient and those described in other studies[1,2] emphasize that ECT may produce asystole at any point during the course of serial ECT despite the use of almost identical anesthetic techniques, and provides further evidence suggesting that subsequent ECT may be safely conducted regardless of the occurrence of asystole or hemodynamically significant bradyarrhythmias.[3–5]

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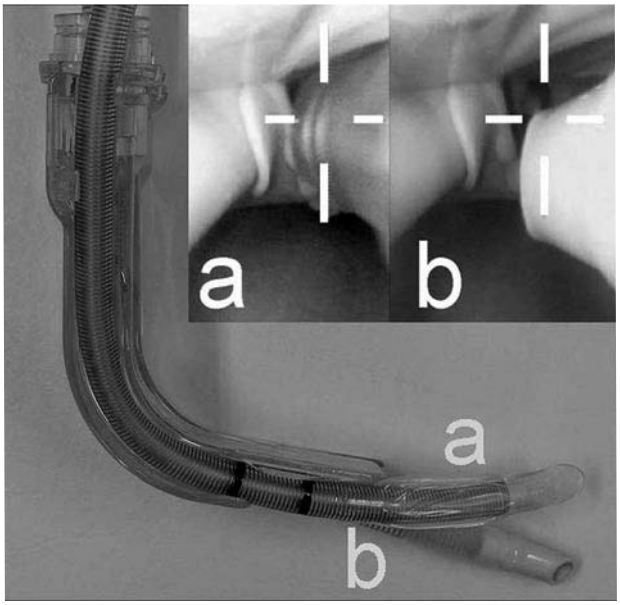

FIGURE Difference of endotracheal tube (ETT) direction comparing curved and straight tubes. A) curved reinforced ETT. B) straight reinforced ETT which often passes posterior to the glottis, potentially resulting in failed intubation.

References

1 *McCall WV.* Asystole in electroconvulsive therapy: report of four cases. J Clin Psychiatry 1996; 57: 199–203.
2 *Burd J, Kettl P.* Incidence of asystole in electroconvulsive therapy in elderly patients. Am J Geriatr Psychiatry 1998; 6: 203–11.
3 *Wells DG, Zelcer J,Treadrae C.* ECT-induced asystole from a sub-convulsive shock. Anaesth Intensive Care 1988; 16: 368–71.
4 *Wulfson HD, Askanazi J,Finsk AD.* Propranolol prior to ECT associated with asystole. Anesthesiology 1984; 60: 255–6.
5 *Kaufman KR.* Asystole with electroconvulsive therapy. J Intern Med 1994; 235: 275–7.

Pentax-AWS® and tube selection

To the Editor:
The Pentax-AWS® (Airway Scope®, AWS; Pentax Corporation, Tokyo, Japan) is a novel video laryngoscope designed to facilitate tracheal intubation under indirect vision. It provides a view of the glottis through a charge-coupled device camera on the built-in colour liquid crystal device monitor without requiring a direct line of sight from above the maxillary teeth past the base of the tongue, which is necessary for tracheal intubation with conventional direct laryngoscopy.[1]

One of the most important features of the Pentax-AWS which facilitates intubation is a target mark on the monitor, which indicates the direction of travel of the endotracheal tube (ETT) as it advances from the tube channel. Operators utilize this target mark during intubation, and start advancing the tube once the target mark has been aligned with the glottic opening.

Despite the advantages of this technique, we have often experienced failed intubation when using a straight reinforced ETT such as the laryngeal mask airway Fastrack™ ETT.

We now realize that this target mark is designated for pre-formed, curved tubes. The direction of ETT advancement from the tube channel differs between curved and straight ETTs (Figure). On the monitor, it can be be seen that the straight ETT moves in a posterior direction, and not towards the centre of the target mark or the glottic opening. For surgery requiring a reinforced ETT, there may be a risk of failed intubation with the AWS when a straight ETT is chosen, despite standard positioning of the glottic opening and target mark on the monitor. To solve this