Correspondence

Postoperative neuroleptic malignant syndrome

To the Editor:

Having read with interest the article by Patel and Bristow,¹ there are several points which require clarification and emphasis.

This is not the first report of the use of muscle relaxants to treat neuroleptic malignant syndrome (NMS). An article by Sangal and Dimitrijevic² reported the successful use of pancuronium in 1985, and Morris *et al.*³ reported the use of tubocurarine to induce muscle relaxation in a patient with NMS in 1980.

As well, concern was raised by Caroff *et al.*⁴ with respect to an association between NMS and malignant hyperthermia (MH). They reported on several NMS patients who had positive responses to the *in vitro* skeletal muscle contracture test on exposure to halothane. Based on their research, they felt there might be an attendant risk of MH in patients (who had experienced NMS) on exposure to triggering anaesthetic agents. This article was a recent one and would not have been published at the time of submission of the article by Patel and Bristow. However, an earlier report in *The Lancet*⁵ detailed similar findings in two patients with NMS. It is important to realize that this association exists and to take appropriate precautions for MH when anaesthetizing a patient with a prior history of NMS: at least until further research into this area is reported.

This article serves to prove that there is still much that is unknown about both NMS and MH. It will be interesting to see what further studies and case reports will uncover about these two pharmacologically induced syndromes.

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- 3 Morris HH, McCormick WF, Reinartz JA. Neuroleptic malignant syndrome. *Arch Neurol* 1980; 37: 462-3.
- 4 Caroff SN, Rosenberg H, Fletcher JE, Heiman-Patterson TD, Mann SC. Malignant hyperthermia susceptibility in neuroleptic malignant syndrome. *Anesthesiology* 1987; 67: 20-5.
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REPLY

We thank Dr. Douglas for bringing to our attention the previous reports of use of nondepolarizing muscle relaxants in the treatment of the neuroleptic malignant syndrome (NMS). Although we realize that there may be an association between NMS and malignant hyperthermia (MH), we elected not to include this controversial area in our case report and discussion. However, we agree it would seem prudent at the present time to exclude MH trigger agents in the conduct of anaesthesia in patients with NMS.

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Laryngoscope blade breakage during intubation

To the Editor:

Laryngoscope malfunction is one of the more frequent equipment failures encountered by anaesthetists.¹ The usual causes are:

- 1 failing light source,
- 2 defective bulb,
- 3 faulty contact between the blade and the handle or in the socket.

A thorough check of the laryngoscope prior to use will detect most malfunctions and these should be corrected before the induction of anaesthesia. Neglecting this precaution could spell disaster, particularly during a rapid-sequence induction.

We wish to report a rare case in which breakage of the laryngoscope blade occurred in spite of a preinduction check of the instrument. The laryngoscope in question was a Miller #2 blade and handle, manufactured by the Heine Co. in Germany. During laryngoscopy of an adult male patient a complete separation of the blade from the hook-on fitting occurred (Figures 1 and 2). The breakage

FIGURE 1 Overall view of the two separated components of the blade.

occurred where the two pieces had been welded and the fiberoptic tract transmitting light to the tip of the blade was completely severed. No excessive force was used during the laryngoscopy and another readily available laryngoscope enabled the patient to be intubated successfully. We wondered if the presence of light-conducting fibers in the blade require the manufacturer to use a different method of manufacturing, resulting in a product less resistant to stresses and strains. Alternatively, sterilization techniques may play a role.

FIGURE 2 Close-up of the two separated components of the blade showing the severed fiberoptic tract.

This incident emphasizes the need to include in the preanaesthetic check of the laryngoscope a manipulation to ensure that the blade will not dislocate easily from the handle or break at the site described here. In addition, a backup laryngoscope in good working order should always be immediately available.

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REFERENCE

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Development of an acute compartment syndrome subsequent to intravenous fluid administration

To the Editor:

A 13-year-old-girl was scheduled for a right shortening transiliac osteotomy. Following uneventful induction of anaesthesia, and before final positioning, a Sorenson Intrafusor® central venous pressure device (#14 gauge