Correspondence

On the proper sterile technique for handling of propofol

To the Editor:

I read with interest the report by Lorenz *et al.* regarding the proper handling of propofol.¹ The authors compared two methods of dispensing this medication, either employing a technique of apparently high sterility or what they term a routine method. The result was that no difference in the contamination rate was found. However, a high rate of contamination was reported in both groups.

I was surprised to read that the authors' routine precautions included the re-use of syringes. The reason is that when a syringe has been filled with a medication, the plunger has been pulled out of the syringe's barrel. The plunger may no longer be sterile since contact with the clinician's fingers is likely. Then, when the drug is administered and the plunger is pushed into the barrel, the barrel too will no longer be sterile. Consequently, upon refilling the syringe, the drug used may be contaminated. For this reason, syringes should never be refilled. This applies to all medications, not just propofol. In addition, the use of a stopcock when handling propofol is to be condemned. This is because the manipulation of the stopcock is likely to lead to the drug's contamination by the clinician's fingers, especially if some component attached to the stopcock, in this case the propofol syringe, is removed.

Also, this study was not conducted in a blinded manner. Its result was negative, that is the null hypothesis, that the two techniques result in the same frequency of contamination was not disproved. This leads me to wonder if a larger study would reject the null hypothesis. Furthermore, the high frequency of contamination suggests that less than meticulous sterile technique was employed. In particular, the sterile technique that the authors term routine cannot be condoned.

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Reference

- 1 Lorenz IH, Kolbitsch C, Lass-Flörl C, *et al.* Routine handling of propofol prevents contamination as effectively as does strict adherence to the manufacturer's recommendations. *Can J Anesth* 2002; 49: 347–52.

The lightwand: a useful aid in the difficult tracheostomy

To the Editor:

Although open, percutaneous and translaryngeal tracheostomy techniques are available, open tracheostomy (OT) remains the most familiar technique at many institutions and still maintains its relevance, particularly where new methods are contraindicated.¹ It is usually considered a safe procedure with a complication rate ranging from 6% to 66%.² This percentage could be higher in the following conditions: morbid obesity, a short and "thick" neck and cervical stiffness.³ In these patients and in any case of difficulty in performing OT, we suggest that the Trachlight (TL; Trachlight™, Laerdal Medical Corp., NY, USA)⁴ could be helpful. We successfully used the TL during a difficult OT in a patient affected by respiratory distress operated under local anesthesia. Because of the short and thick neck and cervical stiffness, it was very difficult for the surgeon to identify the trachea. During the procedure tracheal intubation was needed. Under TL guidance, tracheostomy was carried out easily, without complications.

Light-guided tracheostomy (LT) could minimize the risk of damaging the endotracheal tube or the cuff.⁵ We believe that LT may help tracheal identification in patients with difficult surgical anatomy, a useful and quick procedure to assist surgeons.

In summary, we think the lightwand may be useful, especially in selected difficult cases. We are carrying out a clinical trial in order to evaluate and compare LT and standard open tracheostomy.

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References

- 1 Bybalm C, Lischke V, Westphal K. Translaryngeal tracheostomy in highly unstable patients. *Anaesthesia* 2000; 55: 678–82
- 2 Friedman Y, Fildes J, Mizock B, *et al.* Comparison of percutaneous and surgical tracheostomies. *Chest* 1996; 110: 480–5.

- 3 Dubin J. Tracheotomia. In: Elsevier (Ed.). Encyclopédie Médico-Chirurgicale. Technique chirurgicale. Chirurgia ORL e cervicofacciale. Paris, France. 1995: 46–430.
- 4 Agrò F, Hung OR, Cataldo R, Carassiti M, Gherardi S. Lightwand intubation using the Trachlight: a brief review of current knowledge. Can J Anesth 2001; 48: 592–9
- 5 Addas BM, Howes WJ, Hung OR. Light-guided tracheal puncture for percutaneous tracheostomy. Can J Anesth 2000; 47: 919–22

Another report of obstruction of a heat and moisture exchange filter

To the Editor:

I wish to congratulate Drs. Williams and Stacey on their report describing occlusion of a Pall heat and moisture exchange filter (HMEF) by pulmonary edema.¹ I would like to report a similar incident involving a Pall BB25S HMEF.

A 54-yr-old, previously well man was undergoing debridement of a leg injury. The patient had been fasting since the time of his injury, 36 hr previously. The anesthetic and procedure were uneventful until emergence, when the patient regurgitated a small amount of bile-stained fluid into the laryngeal mask. The fluid reached the HMEF, but it was not obviously heavily contaminated.

The patient developed signs of airway obstruction and auscultation revealed widespread inspiratory and expiratory rhonchi and coarse crepitations. The patient was treated for bronchospasm secondary to aspiration of gastric contents. There was no response to nebulized salbutamol, and the patient was then intubated because of increasing airway obstruction. Aliquots of adrenaline, 50–100 µg, were given intravenously without effect, to a total of 400 µg.

The breathing circuit was then tested, and the HMEF was found to be occluded. The HMEF was changed and resolution of all obstruction occurred. The HMEF was examined. It was not obviously contaminated, but some regions of the HMEF were a faint yellow colour. The affected HMEF weighed 1 g more than a new filter. The patient did not sustain any long-term sequelae, and did not require any special care apart from supplementary oxygen for 12 hr.

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Reference

- 1 Williams DJ, Stacey MRW. Rapid and complete occlusion of a heat and moisture exchange filter by pulmonary edema (Clinical report). Can J Anesth 2002; 49: 126–31.

The appropriateness of the pulmonary artery catheter in cardiovascular surgery

To the Editor:

We read with interest the article “The appropriateness of the pulmonary artery catheter in cardiovascular surgery” from Jacka *et al.*¹ At the Montreal Heart Institute, we use the PAC in all cardiac surgery cases and the transesophageal echocardiography (TEE) in more than half of our patients. Jacka *et al.* extrapolate from their results that a trial on the use of the PAC in stable patients during coronary revascularization is unethical. We disagree. Randomized controlled studies in the preoperative surgical setting have shown that a strategy based on the optimization of oxygen transport using the PAC can reduce mortality in noncardiac surgery^{2–4} and in cardiac surgery.⁵ It is also our experience that the PAC as an adjunct to improve oxygen transport is useful. The PAC can be used as either a diagnostic and prognostic tool. However, any type of monitoring can improve the prognosis only when the result is properly interpreted and effective treatment is introduced. Despite numerous retrospective reports of increased mortality associated with the use of the PAC, a recent randomized trial of 201 patients in the intensive care unit (ICU) has demonstrated that its use was not associated with an increase in mortality.⁶ It is inappropriate to directly and totally attribute the excess mortality or morbidity to the PAC because it is used on sicker patients. Bearing in mind that the PAC is a diagnostic and monitoring tool and not a therapeutic device, it would be surprising that it (or TEE for this matter) would greatly reduce mortality. However, we believe that these devices used by trained individuals can alter the therapeutic approach. The PAC and TEE are particularly useful in the hemodynamically unstable patients. The PAC is useful in the postop ICU setting. During the off-working hours, the nonechocardiographist intensivist or the resident on call can readily evaluate the hemodynamically unstable patients using all routine monitoring including the properly and electively placed PAC to assess response to therapy. Moreover, without the PAC, the continuous measure of pulmonary hypertension would not be