

We feel this case demonstrates that awake fibreoptic intubation can be used safely in patients with carcinoid syndrome, and that aprotinin still has a role to play in its acute management together with octreotide.

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Use and misuse of syringes

To the Editor:

Lessard and Trépanier ask why 60% of Canadian anaesthetists reuse at least some syringes. They present evidence suggesting that any reuse of syringes is misuse since it exposes patients to the risk of cross-infection. Correctly interpreting one of the reasons for reuse, i.e., wastage of drugs, they suggest that this can be minimised by modifications of technique. I suggest that this is a relatively unimportant reason for re-use. I suspect that there are at least two other reasons. First, the evidence of a high risk to patients is not compelling. The same data may be interpreted to suggest that the risk is low and can be made to approach zero with simple modifications of technique that are rigorously applied. Avoiding "old" *iv* infusions, using sets with remote injection ports (more than 1 m from the *iv* cannula) and functional one-way valves, using the opposite arm for BP measurements, and maintaining high index of suspicion for contamination are all simple adaptations.

The second reason, I suspect, is environmental responsibility. If the reuse of syringes by anaesthetists

is eliminated, there could be a 2-fold increase in the volume of contaminated waste generated by our specialty. Most contaminated medical waste ends up in land-fill sites of which every province has a diminishing supply.

I am not convinced that the answer is "use once and throw away." Surely there is an opportunity here to Reduce, Reuse and Recycle.

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REPLY

Dr. Imrie brings a surprising perspective to the issue. Although laudable, these ecological concerns must be weighted against patient safety. We believe that, given a choice, most of our patients would ask for a sterile set of syringes and accept the extra waste. Only patients sharing Imrie's convictions might accept potentially contaminated syringes. Patients should be informed that such working habits are not supported by neither the CDC, ASA, APSE, or Health Canada. We reiterate that "although the estimated risk of transmission of blood borne pathogens associated with the practice of reusing syringes in anaesthesia is low, it is real and not trivial" and that "the practice of reusing a syringe to administer medication to more than one patient is unacceptable and must be abandoned."¹

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Transfusion practices among Mexican anaesthesiologists

To the Editor:

Because the practice of anaesthesia often involves the administration of blood in the perioperative period, we performed a survey to determine the transfusion practices among Mexican anaesthesiologists. A written questionnaire was given to every anaesthesiologist attending the major course organised in 1996 by the *Sociedad Mexicana de Anestesiología*. Of 669 questionnaires, 259 (38.7%) were returned. Questionnaires from residents, 45, and from respondents performing procedures only in children, 9, were excluded. We analysed 205 questionnaires expressing answers in relation to adult patient only. The majority, 69.8%, required patients to have a

minimum preoperative haemoglobin concentration >10 g·dL⁻¹. The two methods preferred to measure blood loss during major surgery were visual estimation (22.9%) and measuring the content of suction bottles (21%). Most respondents would allow patients to bleed to a calculated haematocrit of 30% before blood transfusion (52.2%), and to administer fresh frozen plasma only if altered clotting studies were present (41.9%). Packed red cells are preferred for blood loss of 10–20% (46.7%), while fresh frozen plasma is given for abnormal blood clotting (77.6%) and nonspecific abdominal wall bleeding (49.1%). However, for clinical hypovolaemia the two products preferred were whole blood (41.6%) and packed red cells (21.5%). There were many discrepancies between our colleagues and recommendations suggested previously, i.e., by the ASA Taskforce on Blood Component therapy.¹

We suggest that intensive educational efforts should be addressed to adapt international transfusion experience to our country.

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An anaphylactoid-like reaction following infusion of salvaged unwashed drain blood

To the Editor:

In orthopaedic surgery, postoperative salvage and reinfusion of drain blood has become popular. Complications are few but febrile reactions, hypotension and upper respiratory tract oedema have been reported.^{1,2} The following case report describes an anaphylactoid-like reaction following retransfusion of unwashed salvaged drain blood after hip arthroplasty.

A 67-yr-old healthy woman developed a decrease in BP from 115 to 85 mmHg, signs of urticarial reaction on her arms, legs and body and complaints of shortness of breath, nausea and pressure around the chest area accompanying reinfusion of salvaged drain blood following hip surgery. Blood infusion was stopped and she received 50 mg mepyramine *im*, 100 mg hydrocortisone and 0.2 mg adrenaline *iv*. Within ten minutes the urticarial and symptomatic reactions disappeared and the BP normalised. Five weeks postoperatively, the patient tested negative to extended RAST (Radio-Allergo-Sorbent-Test) for bupivacaine, cefuroxime, furosemide, hydroxyethylstarch and latex, which were used during the operation.

The explanation of the reaction is speculative. After hip surgery the drained blood contains fat from bone marrow and methylmethacrylate monomers from the cement, all of which may initiate pulmonary and vascular reactions. Cascade systems in the blood are activated in drained blood and especially the anaphylatoxins C3a, C5a and TCC (terminal complement complex) can elicit anaphylactoid reactions.³

When blood is washed using the cell saver technique no activated complement is reinfused.⁴ Furthermore, the content of free plasma haemoglobin and fibrin degradation products are very low, which is not the case in unwashed blood.⁵ Therefore, we recommend, that salvaged blood both intra- and postoperatively is washed using the cell saver principle before retransfusion.

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