

with extracorporeal circulation, in patients with already damaged myocardium, evokes an excessive influx of calcium through the altered sarcolemma and may irreversibly damage the myocardial cells, even in the presence of a calcium-mobilizing drug, 4-aminopyridine.

Calcium is an important regulator in biological cell processes, especially in muscle cells. But even though 4-AP is a positive inotropic drug, it may not act to modify the altered excitation-contraction coupling process.

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PREMEDICATION FOR PAEDIATRIC DAY-CARE SURGERY

DEAR SIR,

The excellent paper by Desjardins, Ansara and Charest on premedication for paediatric day-care surgery¹ confirms the practice and opinion of many paediatric anaesthetists. The use of premedication will usually confer little benefit on the child and will occasionally produce unwanted results, delaying the return of normal sensations and behaviour. Yet premedication remains a "routine" in many practices, often given by injection, thereby causing unnecessary pain and distress.

The statement that the presence of a parent during induction of anaesthesia, "is difficult and of no great value" must not go unchallenged, however. Using Vernon's method of assessment² we demonstrated a highly significant improvement in both global mood during induction and post-hospitalization behaviour when the mother was present during induction of anaesthesia in children undergoing outpatient surgery.³ We also demonstrated a close correlation between the degree of disturbed behaviour at induction and behaviour after return home,

which Desjardins, Ansara and Charest were unable to detect. Children who became disturbed during induction of anaesthesia showed signs of psychological disturbance afterwards; the greater the upset, the greater the effect. We consequently routinely invited and advised the mother's presence at induction in all our subsequent practice, which has so far not produced any difficulties.

The omission of premedication may not be the final word in preoperative preparation. We believe that the psychological preparation of both mother and child at a short interview when surgery is first advised is beneficial, as is the provision of an anaesthetic room, especially one equipped for the entertainment of an alert active child.⁴ But the single most effective improvement in acceptance of induction came with the adoption of concealed painless intravenous induction, using an intradermal spray of local anaesthetic or five second spray of ethyl chloride before a concealed injection.⁵

Finally, many intravenous injection agents are unsuitable for children because of pain on injection. We render methohexitone painless by adding a drop of lignocaine before injection.⁴

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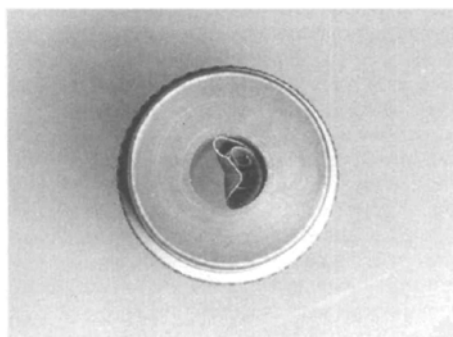
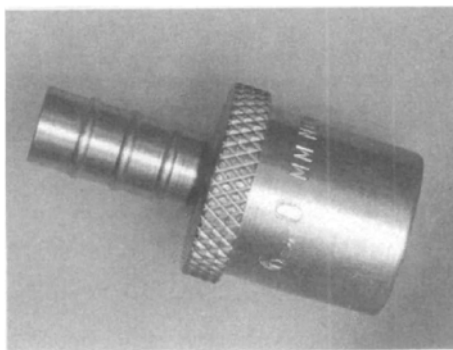
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DEFECTIVE TRACHEAL TUBE CONNECTOR

DEAR SIR,

I would like to draw to the attention of your readers the potential dangers of a recent problem encountered in the use of a DUPACO aluminum tracheal tube connector.



Upon completion of a particularly difficult case involving nasal re-intubation for control of postoperative haemorrhage following maxillo-facial surgery with wire jaw closure, airway maintenance was a major concern. The nasotracheal tube was left in position, sutured to the nasal septum, with the intent of connecting it to a T-piece for administration of humidified oxygen. For positional convenience the acute angled #6 connector was removed for replacement with a straight connector. The one selected from a box of new connectors is illustrated.

Possibly because of the continuing difficulties with the case, and certainly not because of any routine habit of checking connectors, I checked this one carefully before use, to find the defect shown. An internal metallic stamping defect has left a flap-like semi-attached piece of debris which occludes the lumen by approximately 40 per cent. Though the metallic flap is not loose, it could well become dislodged and aspirated. Further, in an angled connector, if such a flap had pointed towards the narrow tube end, the defect might well have escaped casual inspection, hidden by the bend in the connector.

The manufacturer has been consulted and

some reassurance has been given that each connector is carefully inspected before issue. Clearly, this is not entirely effective. It is now my practice to check all connectors routinely before use.

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POSTOPERATIVE OXYGEN

DEAR SIR,

RE: J.R. Rigg: Pulmonary Atelactasis After Anaesthesia, Pathophysiology and Management, Canadian Anaesthetists' Society Journal 28: 305 (July 1981).

I find Dr. Rigg's simplistic approach to this topic informative and well presented. However, I would like to comment on the part of the article concerning oxygen therapy. He wrote: "Although hypoxaemia has been shown to occur in all patients post-operatively ..., these observations have led to the routine use of oxygen after general anaesthesia, but the wisdom of this practice may be questioned for several reasons." Studies done on healthy subjects by Knill, *et al.*¹⁻³ may prove that routine use of oxygen after general anaesthesia is a wise practice after all. These studies demonstrated that subanaesthetic levels (0.1 M.A.C.) of halothane^{1,2} and enflurane³ can cause marked depression of hypoxic response of peripheral chemoreceptors. These alveolar anaesthetic levels are not uncommon in the Post-Anaesthetic Recovery Room in patients who have received the above inhalation agents. Perhaps supplemental oxygen in the Recovery Room in the form of 28 per cent oxygen via venturi-type mask is not so irrational even in patients with chronic lung disease.

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