

marginal effect. As for the validity of comparing percentages, the conclusions are reasonable in the context of unequal total numbers between the groups.

The main aim of our study was to raise the profile of school safety and trigger further studies by the A&E practitioners on this very important national and international issue. We are pleased with the response, even if it is critical.

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### Topical analgesia for children

EDITOR,—We read with interest the paper of Kendal *et al*<sup>1</sup> and wish to raise a few questions. The authors described in detail how the adrenaline-cocaine gel was applied to the wounds but, apart from stating that the lignocaine injections were “standardised using a 25 gauge needle”, we know nothing about the technique used, who injected and sutured (nurse, SHO, registrar, etc), nor the time given for the lignocaine to act before starting the suturing. Standardising the needle gauge and suture size for all lacerations regardless of the site to simplify analysis and satisfy statisticians is bad surgical practice because it means using heavy thread for the face or fine thread for the trunk. Also, to alleviate fear of the “sight of the needle”, a point made by the authors, is obviously desirable, but how did they alleviate fear of the sight of the stitching needle, the forceps, and the needle-holder? To find out that 40% of patients and/or parents considered suturing lacerations under lignocaine “unacceptable” may simply mean poor overall technique. How do they account for this extraordinarily high patient/parent dissatisfaction? We also want to know the authors’ explanation of their high “failed” anaesthesia rate of 24% in the lignocaine group and how they managed this subgroup: did they proceed regardless or was more lignocaine given, or was the gel therefore applied?

Another unclear point is the authors’ evaluation of cost. They state that the gel costs £2 for one application, while a 10 ml ampoule of lignocaine costs 25p. Although they were only dealing with lacerations less than 2 cm in length, they conclude that even after considering patient volume, the overall cost implications were tiny. How can they explain this, given that a 1.9 cm cut should only require a 5 ml ampoule priced at a mere 16p? Also why haven’t they tested any of the available lignocaine gels? Although they are not licensed for open wounds, neither is the adrenaline-cocaine gel, and lignocaine gels are available in all accident departments.

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1 Kendall JM, Charters A, McCabe SE. Topical anaesthesia for children’s lacerations: an acceptable approach. *J Accid Emerg Med* 1996; 13:119–22.

### The authors reply:

We thank Nathan and McKeever for their comments and would like to address some of the issues they have raised.

One per cent plain lignocaine was infiltrated locally around the wound using a 25 gauge needle by experienced nursing staff, who per-

form the majority of the suturing at Gloucester Royal Infirmary. The lignocaine was not warmed or buffered, and 10–15 minutes was allowed to elapse before beginning suturing. Nurses were already trained to try and conceal or minimise the “sight of the needle” by distraction, play, and other techniques; clearly these factors should have applied to both study groups.

Needle gauge and suture size were appropriate and the same for equivalent wounds in both groups (5/0 or 6/0 ethilon for facial wounds, and 4/0 for trunk wounds).

Thirty nine per cent of parents found the procedure using lignocaine “stressful” or “unacceptable” (not 40% “unacceptable” as misquoted); this figure is not surprising, since a many parents are quite naturally going to find watching this procedure stressful. The point is also made in our paper that it is very difficult to distinguish pain from fear, especially as the child gets younger, and we are all aware that a frightened child may cry even if the local anaesthetic is working perfectly well. This is obviously a limitation in this kind of observational study, but visual analogue scoring is the best available validated way of assessing these issues at present. There are anxiety scores which can be used to quantify this contribution, but the effectiveness of these also decreases with age.

The inclusion criterion is stated as lacerations less than 4 cm length (not 2 cm as misquoted), and patient volume refers to the number of patients with suitable lacerations (that is, requiring suture, of an appropriate length, and in an appropriate position); this quite clearly is a relatively small number (120 over an 11 month period—approximately 10% of all children presenting with a laceration—in a department seeing 40 000 new attendances per year). This, as stated, represents a tiny cost implication to an accident and emergency department.

We evaluated adrenaline-cocaine gel because, despite its widespread use around the world as an effective and safe topical anaesthetic when used appropriately, awareness of this preparation in the UK was shown to be very limited (<5% of all accident and emergency consultants), as stated in our original paper.

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### Fasting before Bier’s block

EDITOR,—We wish to respond to the article by O’Sullivan *et al* relating to the need for patient fasting before manipulation of a fracture under Bier’s block.<sup>1</sup> Having recorded a low incidence of complications by postal questionnaire, the authors concluded that fasting was unnecessary and suggested that instead of conferring additional safety, it merely served to delay treatment. We feel this study is seriously flawed, and that to alter clinical practice as a consequence must be regarded with great caution. For this hypothesis to be adequately tested it would be necessary to conduct a prospective study; it is likely that to

attain the necessary level of power, a large number of patients would need to be studied.

To conduct a Bier’s block safely it is necessary to produce strict written guidelines defining technique, equipment, level of monitoring, assistance, and necessary level of clinical experience of the practitioner. Complications are far more likely when these conditions are not met. The questionnaire in collecting information failed to ascertain adequately how the responding departments audited these data or whether each department had issued guidelines. Several points arising from the data inferred that current practice was neither entirely safe nor effective: (1) three units still used lignocaine; (2) the large number of responders reporting the use of additional sedation/analgesia; (3) the significant number of reports of equipment failure.

The article tends to trivialise the potential risks of the Bier’s block, as well as using incomplete data to propose a serious change in clinical practice. To omit a fasting period merely as an exercise in reducing patient waiting time would be foolhardy. In the context of risk management, any litigation arising from this questionable change in practice could be financially damaging to any Trust. It would be interesting whether in the light of adequate explanation of potential risk, the patient would view the fasting period as nothing more than minor inconvenience.

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1 O’Sullivan I, Brooks S, Maryosh J. Is fasting necessary before prilocaine Bier’s block? *J Accid Emerg Med* 1996;13:105–7.

EDITOR,—We read with interest the article by O’Sullivan *et al*<sup>1</sup> questioning the need for starvation before prilocaine Bier’s block. While we agree that the retrospective audit appears to show no morbidity directly attributable to a full stomach, we would question the conclusion that fasting is unnecessary.

Traditional teaching for anaesthetists is to prepare patients for Bier’s block with the same attention to detail given to those undergoing general anaesthesia. This includes fasting to reduce the risk of aspiration, as the airways’ protective reflexes may still be compromised in the awake patient if, for example, hypotension or fitting occur. Both of these complications can be precipitated by local anaesthetic toxicity. As 23 (of 122) centres reported equipment failures—of which 18 mentioned cuff leak—we can see that this scenario is far from implausible.

Of greater concern is the concurrent use of sedation in 21 centres. This practice, which on its own can compromise airway reflexes, is in our opinion an absolute contraindication to a non-fasting policy. Furthermore, in the paper’s concluding comments, this potential danger was not addressed at all.

The apparently low incidence of morbidity in this report, and the fact that there have never been any deaths related to the use of prilocaine Bier’s blocks, does not preclude the need to fast patients. The potential for aspiration of stomach contents remains a real threat which can have catastrophic consequences;