Glossopharyngeal nerve block for tonsillectomy or uvulopalatopharyngoplasty

To the Editor:

The use of local anaesthetic for tonsillectomy is not new. Combined with general anaesthesia, glossopharyngeal nerve block improves operative conditions and provides excellent postoperative analgesia. The glossopharyngeal nerve supplies most of the sensation responsible for pain transmission following tonsillectomy or uvulopalatopharyngoplasty. It can be blocked using an intraoral approach with a single point injection where the nerve lies just deep to the tonsil bed. When combined with general anaesthesia the technique decreases anaesthetic requirements and eliminates intraoperative swallowing. Adult patients report pain free periods of more than six hours postoperatively. Although children still often cry on awakening their recovery from anaesthesia appears to be much smoother.

Many approaches have been described. We use the following because it does not interfere with the surgical field and it seems to have longer lasting results than peritonsillar infiltration or injection at the base of the tongue. A standard 21 gauge, 4 cm needle is attached to a Luer locked three ml syringe containing bupivacaine 0.5% with epinephrine. The distal 1.5 cm is bent to 90°. After induction of anaesthesia, securing the airway and providing eye protection, an assistant retracts the tonsil laterally with the suction apparatus and the tongue is retracted with a laryngoscope blade. The tip of the needle is directed laterally behind the posterior arch so that it lies deep to the tonsil bed. The point of entry is anywhere behind the posterior arch. The 90° angle allows for safe contact with the retropharyngeal mucosa. The needle tip will pierce the retropharyngeal mucosa laterally and can be safely directed behind the tonsil blindly. After aspiration to avoid intravascular injection, three ml local anaesthetic are injected in an adult. For a small child the dose is one to two ml.

Our surgeons and nurses have been impressed with the effectiveness of this technique in controlling postoperative pain. The time spent performing the block is more than compensated for by earlier and much smoother recovery at the end of the procedure.

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Broadman LM, Patel RI, Feldman BA, Sellman GL, Milmore G, Camilon F. The effects of peritonsillar infiltration on the reduction of intraoperative blood loss and post-tonsillectomy pain in children. Laryngoscope 1989; 99: 578–81.

Epidural and intravenous fentanyl

To the Editor:

We read with interest the paper by Baxter *et al.*, Canadian Journal of Anaesthesia 1994; 41: 184–91, "A comparison of lumbar epidural and intravenous fentanyl infusions for post-thoracotomy analgesia," and its accompanying editorial "epidural opioids for post-thoracotomy pain" by Grant and we would like to offer some comments.

The combination of neuraxial and systemic opioids has been highlighted as a hazardous combination, encouraging the development of delayed respiratory depression.[1] The intensive surveillance carried out in this study and the 17 patients (of 50) given naloxone illustrates this point. As a research model for the justification of a neuraxial route of opioid administration this study may have a place, but it has little application to the clinical situation.

The data behind the conclusion that epidural fentanyl produced better analgesia do not appear to have been included. The stated improvement appears to have been a lower visual analogue pain score (presumably at rest) at two hours in favour of the epidural group and a trend towards lower pain scores when the patients receiving naloxone were excluded. We were unsure from the labelling of Figure 1 whether all patients were represented in the graph or only those who had not received naloxone. Against this, there was no difference in amount of self-administered morphine, indices of respiratory function showed the same pattern of impairment, the incidences of opioid-related side effects were the same and complications and hospital stays were equal. We believe, and we have shown, that an effective analgesic technique should be able to influence all of these variables.[2] We were particularly disappointed that we could not compare the pulmonary function data of this paper with our own techniques as the presentation of the former omitted presentation of the patients' preoperative spirometric record-