

Correspondence

Bilateral interpleural block for midline upper abdominal surgery

To the Editor:

Continuous interpleural block provides effective postoperative analgesia following a variety of operations with unilateral skin incisions.¹⁻² We report a case where bilateral interpleural blocks combined with light general anaesthesia were used to provide intraoperative and postoperative analgesia for midline upper abdominal surgery.

A 23-yr-old male, weighing 55 kg with chronic ulcer disease, but in otherwise good health, presented for vagotomy and pyloroplasty. Premedication consisted of meperidine 50 mg and promethazine 25 mg *im* one hour pre-op. In the operating room ECG, automatic blood pressure cuff and pulse oximeter probe were applied and an *iv* infusion commenced. The patient was further sedated with fentanyl 100 µg and midazolam 2 mg and placed in a lateral position. Following skin preparation with betadine and local anaesthetic infiltration, an interpleural catheter was placed in the seventh intercostal space at the posterior axillary line using a loss of resistance technique. The patient was turned to the opposite side and the procedure was repeated. The catheters were both introduced a distance of 4–5 cm in the interpleural space, taped in place and draped over the shoulders. After the second catheter was placed, the patient was turned supine and 30 ml of bupivacaine 0.25% with epinephrine 1:200,000 were injected on each side.

General anaesthesia was then induced with thiopentone 225 mg and was followed by succinylcholine 80 mg. The trachea was intubated with a 9 mm tracheal tube and allowed to breathe spontaneously a mixture of 70% nitrous oxide in oxygen and halothane 0.3% delivered from a circle absorber system. One half-hour into the surgery the halothane was discontinued, as it appeared unnecessary and the patient received an additional 2 mg of midazolam to prevent awareness. No additional narcotics were given. The surgeons were asked to evaluate muscular relaxation at several times throughout the case and commented that it was satisfactory. The patient's blood pressure ranged between 125/70 and 105/55 and the pulse between 60 and 80/minute. The end tidal CO₂ and arterial O₂ saturation remained stable and within normal limits, in

spite of surgical retraction. Throughout the operation there were no signs of discomfort, light anaesthesia or sympathetic discharge. Surgery lasted 120 minutes.

In the recovery room the patient's only complaint was of nasal discomfort from the nasogastric tube. A chest x-ray taken in the recovery room showed a small pneumothorax on the right which resolved without treatment over the next few hours.

The patient received four top-up injections on the ward, the timing of which depended on the availability of one of the authors. These consisted of 20 ml of bupivacaine 0.25% with epinephrine 1:200,000 on each side.

We were impressed by the profound difference in analgesia before and after each injection. The patient also received two 50 mg doses of *im* meperidine in the first 24 hours, but no additional narcotics. Both catheters were removed on the third postoperative day and the patient made an uneventful recovery.

The use of bilateral interpleural blocks has been described previously in two patients with cancer pain and rib fractures respectively.⁴ Potential complications can occur such as pneumothorax and toxicity from absorption of local anaesthetics. Also, the use of nitrous oxide following air to locate the interpleural space may potentially enlarge a pneumothorax.

Clearly, detailed studies are required to determine the efficacy and safety of the bilateral technique as well as its effect on cardiopulmonary function.

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A nontraumatic induction technique for paediatric patients

To the Editor:

Induction of anaesthesia is frequently a traumatic and frightening experience for young children. The standard technique of inhalational induction for paediatric patients is often a struggle due to separation from parents, a fear of suffocation, and the unpleasant smell of the inhalational agent. Various methods of premedication and induction have been suggested to alleviate these problems.^{1–3}

An induction technique that I have found useful in the four- to eight-yr-old range involves having the child interact with the capnograph. I ask the child to hold the mask tightly on his face, take a deep breath and exhale while watching the monitor. Usually children induced in this manner are quite pleased when they discover that they have made a "bump" on the monitor. I ask the child to try to make "big bumps", "little bumps", "multiple bumps" in a row, while counting with me. While they are doing this I start with high flows of nitrous oxide ($7 \text{ L} \cdot \text{min}^{-1}$) and oxygen ($3 \text{ L} \cdot \text{min}^{-1}$) and gradually introduce an inhalational agent, usually halothane.

This technique helps to distract the child while facilitating the induction of anaesthesia. Because the child has some control over the situation, the induction turns out to be a pleasant and nontraumatic experience.

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Research Development Day

To the Editor:

The Department of Anaesthesia at UBC has developed a program to encourage and improve clinical research. "Research Development Day" started in 1988 and is offered to all residents and faculty. The aim of the program is to offer guidance in developing the skills necessary to initiate and complete research and to improve written and oral presentation. The morning of the program is devoted to didactic lectures by three to four speakers which is followed by afternoon workshops. The afternoon workshops are designed so that each participant spends a portion of the time with each facilitator. Lecturers are chosen who are dynamic speakers and enthusiastic about their field. Flexibility is another essential attribute as they have to adapt to the needs of the participants. Speakers have been drawn from the faculties of Anaesthesia, Epidemiology, Pharmaceutical Sciences, Computer Science, Library Science and from the UBC Clinical Screening Committee for Research Involving Human Subjects. Each of the speakers contributes a written handout which is given to the registrants.

The topics covered in the first year consisted of (1) getting started in research; (2) writing for publication; and (3) slide-making and oral presentation. The afternoon workshop on the first topic consisted of designing a clinical research project. The workshop on writing examined abstracts which were critiqued by the group. The third workshop utilized resident presentations which had been prepared for the annual residents' competition. These oral presentations and the slides were analyzed and suggestions for improvements were made.

The second year was designed to expand on these topics and included: (1) the ethics of research; (2) using the library; (3) statistics; and (4) writing a grant application. The workshops followed a similar format with hands-on experience for the participants.

The theme for the third year was Computers in Research and the topics included: (1) the use of computers for research; (2) the types of computers for research needs; (3) word processing; and (4) computer use for statistics and graphic aids. The afternoon workshop was held in a computer laboratory where each participant had