Effect of anesthesia consultation on patients' preoperative concerns

To the Editor:

Preoperative anxiety in relation to anesthesia is a major concern for many surgical patients.^{1,2} Patients often have distorted concerns about the risks of anesthesia which can contribute to preoperative anxiety,³ and potentially, a poor quality of recovery.⁴ Existing evidence suggests that preoperative anesthesia consultation can reduce patients' overall anxiety,⁵ but there is little data in the literature that compares the areas of concern *before* and *after* the consultation. The purpose of this study was to assess the effect of preoperative anesthesia consultation on patients' concerns regarding anesthesia.

After approval from the Institutional Research Ethics Board, patients scheduled for preoperative anesthesia consultation were asked by a research assistant to complete a survey prior to and after their consultations. The survey included 11 questions on anesthesia-related concerns derived from the literature^{1,2} and opinions of staff anesthesiologists; the questions required a yes or no response. McNemar's Chi-square test was used to compare the presence of concerns before and after the anesthesia consultation. To adjust for multiple comparisons, $P < 0.01$ was considered statistically significant.

Eighty patients were asked to participate; 78 agreed and two were excluded due to language barriers. The mean participant age was 63 ± 16 yr and 60% were male. Sixty-one percent were scheduled for general anesthesia, 31% regional anesthesia and 8% local anesthesia with sedation. Patients comprised of the following surgical population: orthopedics (32%), neurosurgery (23%), ophthalmology (21%), general surgery (13%), and genitourinary (11%). Prior to the consultation, the most frequent concerns expressed by patients were: pain after surgery (53.9%), pain during surgery (36.8%), death (36.8%), waking up during surgery (32.9%), and nausea/vomiting (32.9%) (Table). Our results of the commonly expressed concerns are consistent with other reported studies.^{1-3,6} However, two concerns were significantly decreased after the anesthesia consultation. The fear of waking up during surgery was decreased to 11.8% ($P < 0.001$), and the fear of feeling pain during surgery was decreased to 22.4% ($P = 0.007$).

In summary, pain after surgery, pain during surgery, death, waking up during surgery, and nausea/vomiting are concerns frequently expressed by patients prior to the anesthesia consultation. Anesthesia consultation

TABLE Respondents' concerns regarding anesthesia pre- and postanesthesia consultation

Concern	Preanesthesia consultation (%)	Postanesthesia consultation (%)	P
Pain after surgery	53.9	52.6	1.000
Feeling pain during surgery	36.8	22.4	0.007*
Death	36.8	27.6	0.065
Waking up during surgery	32.9	11.8	< 0.001*
Nausea / vomiting	32.9	22.4	0.057
Brain damage	23.7	13.2	0.021
Paralysis	23.7	13.2	0.021
Sore throat	21.1	15.8	0.388
Memory loss	17.1	15.8	1.000
Dental damage	14.5	6.6	0.070
Hearing noises / voices	11.8	7.9	0.549

*Postanesthesia consultation compared to preanesthesia consultation, $P < 0.01$.

appears to reduce certain patient concerns, including waking up and feeling pain during surgery. Prospective multicentre studies are warranted to further evaluate the effects of preoperative anesthesia consultation on patients' concerns with anesthesia; this may allow the generalization of our results to a wider surgical population.

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References

- 1 Matthey P, Finucane BT, Finegan BA. Attitude of the general public towards preoperative assessment and risks associated with general anesthesia. *Can J Anesth* 2001; 48: 333-9.
- 2 Klapka JM, Roizen MF. Current understanding of patients' attitudes toward and preparation for anesthesia: a review. *Anesth Analg* 1996; 83: 1314-21.
- 3 Sosis MB, Parnass SM, McCarthy RJ, Braverman B, Watson G, Halter T. Spinal phobia: survey results of patient attitudes and preferences regarding anesthesia. *J Clin Anesth* 1995; 7: 389-94.
- 4 Brull R, McCartney CJ, Chan VW. Do preoperative anxiety and depression affect quality of recovery and length of stay after hip or knee arthroplasty? (Letter). *Can J Anesth* 2002; 49: 109.

- 5 Conway JB, Goldberg J, Chung F. Preadmission anaesthesia consultation clinic. *Can J Anaesth* 1992; 10: 1051-7.
- 6 Shevde K, Panagopoulos G. A survey of 800 patients' knowledge, attitudes, and concerns regarding anaesthesia. *Anesth Analg* 1991; 73: 190-8.

Double lumen tube placement with the Pentax-Airway Scope®

To the Editor:

Placement of double-lumen endobronchial tubes (DLT) in patients with difficult airways can present a major clinical challenge to the anesthesiologist. When glottic exposure is incomplete under direct laryngoscopy, tube placement may be achieved by blind probing for the glottic opening behind the epiglottis. However, a blind approach with a DLT can cause serious complications such as dislocation of the arytenoid cartilage,¹ or airway trauma. Alternative techniques using the Bullard laryngoscope and other devices have been reported to facilitate DLT placement^{2,3} but are not uniformly successful.

The Pentax-Airway Scope® (AWS) system is a novel intubation device which consists of a built-in monitor and camera, and an anatomically shaped blade holds a tube in the channel. The AWS improves the laryngeal view to facilitate tracheal intubation without requiring a laryngoscopist's line of sight.⁴

The AWS can be an excellent tool in the management of difficult intubations, and up to an 11-mm external diameter tube can be set into its tube channel. The largest DLT available for the AWS is a size 32 Fr, which is not enough for adult patients requiring one-lung ventilation. To address this limitation we remove the back plate of the tube channel for intubation with larger DLT (Figure).

We used this modified blade for a 39Fr DLT placement in a 56-yr-old male (170 cm, 65 kg). At the first intubation attempt, the laryngeal view obtained with Macintosh #4 blade was a Cormack-Lehane grade 2b, and the bronchial lumen, but not the tracheal lumen, could be advanced into the trachea. Next, we bent the DLT to fit the contour of the AWS blade, held along with the AWS, which was inserted into the patient's oropharyngeal space. The DLT tip was continuously observed on the monitor to ensure avoidance of soft tissue injury during insertion. Visualization of the patient's vocal cords was achieved easily, the percentage of glottic opening score being 90%, which is equivalent to Cormack-Lehane grade 1. Advancement to the bronchial lumen was achieved easily, followed

FIGURE 1) Photograph of the disposable blade (Pblade®) tip for AWS. Up to 32 Fr DLT can be set in the tube channel. 2) Modified blade for DLT placement. Back plate of the tube channel was removed (white arrow). 3) AWS with 41 Fr DLT. A DLT stylet was bent to fit the contour of the Pblade®. 4) Laryngeal view shown on the AWS's built-in monitor. Bronchial lumen (BL) is entering into the trachea. 5) The main lumen (ML) is entering into the trachea. 6) DLT placed within the trachea at the optimal depth. DLT = double-lumen endobronchial tube; AWS = Pentax-Airway Scope®.

by tracheal lumen insertion with gentle counterclockwise rotation of the DLT. The DLT was placed successfully under indirect vision within 40 sec.

This is a similar approach to that reported with the Glidescope.⁵ However, the AWS may have several advantages over the Glidescope since the DLT can fit into the space behind the blade (originally it was a tube channel). Additionally, continuous observation of the tube tip can be achieved, and the laryngeal view is always improved to grade 1 by direct elevation of the epiglottis, as with Miller laryngoscope blades.³