

TABLE I Summary of anaesthetic technique

		<i>Knee scope</i>	<i>Bunions</i>	<i>Haemorrhoids</i>	<i>Carpal tunnel</i>	<i>Cataract</i>
As an anaesthetist	GA(%)	87.8	77.7	81.2	16.4	4.1
	RA(%)	12.2	22.3	18.8	83.6	95.9
As a patient	GA(%)	60.9	56.1	61.7	10.1	2.8
	RA(%)	39.1	43.9	38.3	90.0	97.2

$P < 0.01$  between GA and RA for both groups and all procedures.

TABLE II Use of regional anaesthesia

		<i>Knee scope</i>	<i>Bunions</i>	<i>Haemorrhoids</i>	<i>Carpal tunnel</i>	<i>Cataract</i>
Experience (yr)	0-10	15.5%*	31.1%*	19.4%	84.6%	97.6%*
	10+	10.1%	16.7%	18.2%	83.3%	94.6%
Practice	Community	9.3%	17.0%	14.3%	83.9%	94.6%
	University	15.5%*	29.5%*	24.5%*	83.8	97.4 %*
Training	Good	12.2%	22.7%	19.0%	82.2%	95.4%
	Poor	12.3%	22.1%	18.8%	84.6%	96.1%

\* $P < 0.01$  (between groups).

a patient, and (b) the attending anaesthetist for the following five minor procedures: knee arthroscopy, bunionectomy, haemorrhoidectomy (lithotomy position), carpal tunnel release and cataract excision.

A total of 458 (46.3%) questionnaires was returned. Respondents preferred to give and receive GA more frequently for all procedures ( $P < 0.01$ ) except for carpal tunnel release and cataract excision, where RA was the preferred technique ( $P < 0.01$ , Table I).<sup>1</sup> Fifty-nine percent of Canadian-trained and 72.3% of foreign-trained anaesthetists described their training in RA as "poor." The quality of training in RA, however, did not influence the use of RA for any of these procedures. Respondents with university-based practices used RA more frequently than GA for all procedures except for carpal tunnel release ( $P < 0.01$ , Table II). Respondents with less than ten years experience also chose to use RA more frequently for all procedures ( $P < 0.01$ , Table II).<sup>2</sup>

A lack of patient understanding of the risks and benefits of regional techniques remains a challenge to anaesthetists. In order for patients to become properly informed, however, anaesthetists must be knowledgeable and confident in their ability to administer an efficient and effective regional anaesthetic. Unfortunately, tight operating room schedules and staff anaesthetists who lack the necessary expertise in teaching RA, provide residents with suboptimal conditions in which to acquire proficiency in RA. The recent introduction of a dedicated pe-

riod of time in pain management will hopefully provide anaesthesia residents with an opportunity to develop skill and confidence in RA.

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## *Fibreoptic intubation*

To the Editor:

Fibreoptic intubation is a valuable technique in management of the difficult airway.<sup>1</sup> One problem which may arise is the use of too flexible a fibrescope with too stiff an endotracheal tube, so that the tube may pull the fibrescope out of the trachea instead of following it down through the larynx.<sup>2,3</sup> The use of a small diameter endo-

tracheal tube, softened by warming, can facilitate employment of a fine, very flexible fibrescope for endotracheal intubation.

Two cases are reported in which a fibreoptic nasopharyngoscope was used to intubate the trachea in patients whom it would have been difficult or impossible to intubate with a rigid laryngoscope.

#### Case #1

A 48-yr-old woman with severe deforming rheumatoid arthritis presented for cosmetic rhinoplasty. Clinical examination revealed micrognathia and a rigid cervical spine, fixed in moderate flexion. Mouth opening was limited to 1.5 cm between tips of incisors. Cervical spine x-rays revealed no instability. There was no neurological deficit. Both patient and surgeon expressed preference for general anaesthesia. Consultations with her rheumatologist and a general internist confirmed that she had no serious haematological, cardiac, renal or pulmonary complications, and it was considered that if her airway could be managed safely, the likely benefits of the procedure outweighed the risks. This was discussed at length with the patient, who was advised that awake intubation would be attempted and, if unsuccessful, the procedure would be cancelled.

With the surgeon standing by, and after *iv* sedation with midazolam 2 mg and glycopyrrolate 0.2 mg, topical anaesthesia with xylocaine 4% was achieved by gargling. Fibreoptic laryngoscopy was easily performed using a Pentax FNL-10S nasopharyngoscope (length of insertion tube = 300 mm, diameter of insertion tube = 3.5 mm). Because the endoscope had no suction channel, the larynx was sprayed with 2 ml xylocaine 4% through a cricothyroid puncture (using a 25G needle). Oral intubation over the fibrescope with a softened 6.5 mm endotracheal tube was then performed without difficulty or coughing. General anaesthesia was induced and the surgery performed without incident.

#### Case #2

A 40-yr-old woman in good health presented for cosmetic rhinoplasty. Having had a previous LeFort procedure and with mouth opening limited to 2 cm, she was known to be "a difficult intubation." She had undergone awake fibreoptic intubation before, and understood and accepted the need for it. After sedation and topical anaesthesia as in case #1, orotracheal intubation was performed without incident using the fibreoptic nasopharyngoscope. After general anaesthesia and muscle relaxation were induced, an attempt was made to visualize the larynx with a Magill #3 laryngoscope blade. It was impossible to see the base of the tongue, let alone the larynx.

These cases show that even a very light flexible fi-

brescope may be used successfully for adult orotracheal intubation, using a small, warmed endotracheal tube. Erikson<sup>4</sup> described the use of a similar instrument for nasal (nor oral) intubation, but used it rather to bend the longer naso-tracheal tube (he lined up the end of the tube with the end of the fibrescope) and direct it towards the larynx which he manipulated digitally, to move the glottis into line with the tube. This was in contrast to the method used here, of using the fibrescope like a guide wire in the Seldinger technique. It is not suggested that the nasopharyngoscope be chosen instead of the bronchoscope, but that in the absence of the latter, the former may be employed rather than abandoning the procedure or resorting to other potentially more traumatic methods such as a blind retrograde technique.

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## *Tracheal intubation and cervical injury*

To the Editor:

I have read with interest the dialogue between Drs. Drummond and Crosby in the Correspondence section of the November, 1992 issue<sup>1</sup> regarding the best method for the elective intubation of the cervical spine-injured patient.

I had the misfortune of intubating fibreoptically awake and anaesthetizing a 77-yr-old Class 4 ASA patient with ankylosing spondylitis who had sustained a fracture dislocation of C<sub>5-6</sub>. Tragically, he developed quadriplegia postoperatively. The first "expert witness" for the plaintiff, an 86-yr-old neurosurgeon who hadn't operated since 1976, testified that not performing a tracheostomy "constituted a wanton disregard of principles." The second "expert witness" for the plaintiff, a disabled neurosurgeon, testified that I hyperextended the patient's neck during