tive to IA morphine for postoperative analgesia after arthroscopic surgery, especially in patients with more than six months of preoperative pain.

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Low-dose epidural anesthesia for cervical cerclage

To the Editor:

McDonald cervical cerclage is an obstetric outpatient procedure in the lithotomy position frequently performed under spinal anesthesia (SA). Recently, lowdose SA techniques facilitating intraoperative hemodynamic stability and fast recovery have been described for this and other outpatient procedures.¹⁻³ However, undesirable outcomes of SA include transient neurologic symptoms (TNS) from local anesthetic toxicity particularly for procedures in the lithotomy position^{4,5} and nausea and pruritus from adjuvant intrathecal opioids.1 Low-dose, or differential epidural anesthesia has not been described for McDonald cerclage as an alternative technique. A healthy 41-yr-old female, gravida 2 para 0, presented for the above procedure at 13 5/7 weeks gestation. Based on her prior anesthetic experience she requested regional anesthesia that would provide a gradual onset and minimal motor blockade. After initiation of electrocardiogram, noninvasive blood pressure and oxygen saturation monitoring in the operating room an 18-G epidural catheter was placed in the L 3-4 interspace. A negative test dose

of 3 mL of 0.125% bupivacaine with epinephrine 1:200,000 was followed by incremental epidural administration of a total of 20 mL of bupivacaine 0.125% with 50 µg of fentanyl added to the first 10 mL of solution. A sensory level to T4 by cold sensation was apparent at 15 min. During placement of the epidural catheter and the subsequent 26 min surgery the patient received 50 µg of fentanyl intravenously in divided doses. Blood pressure, heart rate and oxygen saturation remained within normal limits and free movement of the legs (Bromage 0) was preserved during the procedure. The patient and her anesthesiologist maintained a conversation throughout. The surgeon rated operating conditions as satisfactory. The patient easily moved herself to the stretcher postoperatively and was highly satisfied with her anesthetic. No nausea or pruritus occurred. She was discharged uneventfully after a fourhour bedrest dictated by the obstetric protocol. This case shows that low-dose epidural anesthesia can be an alternative to SA for selected patients presenting for McDonald cerclage. Advantages include the absence of the risk for TNS, and possibly a reduced incidence of perioperative nausea and pruritus. The technique could be improved by using less volume of local anesthetic solution to achieve the T8 level of sensory blockade that suffices for this surgery. Placement of an epidural catheter perceived as cumbersome for outpatients may not be needed when employing a single-shot epidural technique instead. Comparative outcome studies are desirable.

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Anesthesia for magnetic resonance imaging in children: a survey of Canadian pediatric centres

To the Editor:

We recently conducted a telephone survey of pediatric anesthesia departments in 11 Canadian university centres. Department chiefs (or designates) were asked to identify current anesthesia practice and concerns for pediatric magnetic resonance imaging (MRI). In all 11 centres, care was provided by pediatric anesthesiologists, with ten centres having MRI compatible machines available. All centres routinely used capnography and pulse oximetry. Eight centres routinely used non-invasive blood pressure monitoring. Five centres routinely used electrocardiogram (ECG) monitoring, and two centres had no MRI compatible ECG available. In seven centres the anesthesiologists were located in the control room during scanning. Staff were more likely to remain in the scanning room if a slave monitor was unavailable in the control room.

Six centres predominantly used a propofol total *iv* anesthesia technique (TIVA), with the other five centres using a volatile technique more frequently or exclusively. Centres predominantly using TIVA were less likely to instrument the airway (Table). Propofol induction and maintenance dose estimates ranged from 2 to 6 mg·kg⁻¹ (mean 3.7) and 100 to 250 µg·kg⁻¹·min⁻¹ (mean 165) respectively, with one centre using boluses as required rather than an infusion. Three centres routinely using TIVA had no MRI compatible infusion pump available;

TABLE Comparison of centres using TIVA as predominant technique *vs* centres occasionally using TIVA

	Centres predominantly using TIVA (n = 6)	Centres occasionally using TIVA (n = 4)
Routine airway m	ethod for TIVA	
Nasal prongs	4	0
Mask	1	0
LMA	0	3
Mixture (LMA, E'	TT	
or no airway)	1	1

TIVA = total iv anesthesia; LMA = laryngeal mask airway; ETT = endotracheal tube.

instead using a remote pump with a hydraulic interface, or a manual method calculating drops per minute. Propofol sedation techniques have been well described previously, although often with lower doses of propofol than we found in this survey.¹⁻³ Centres not routinely using TIVA had concerns about maintaining and monitoring the airway if nasal prongs or a face mask were used.

Annual caseload estimates ranged from 20 to 1,400 children. Many centres noted increasing demand from radiology departments for anesthesia services, with one centre commenting that anesthesia out of the operating room currently accounts for greater than 30% of the department workload. Most centres felt that seven to eight years was the age at which children more reliably tolerated scanning without anesthesia. The mean daily caseload for centres predominantly using TIVA was 9.2 (5–12) *vs* 7.2 (5–10) for other centres, possibly due to shorter induction and emergence periods as the airway is instrumented less often.

We conclude that anesthesia for MRI accounts for a significant workload for pediatric anesthesiologists. Some centres remain concerned about the safety of TIVA using nasal prongs or face mask despite the suggestion it may decrease anesthesia time.

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Lafutidine vs cimetidine to decrease gastric fluid acidity and volume in children

To the Editor:

General anesthesia carries a risk for aspiration pneumonitis.¹ Histamine H_2 receptor antagonists have been administered to minimize the risk of acid aspiration syndrome by decreasing gastric secretion.² In the