committee to present identified topics. The speakers are instructed to provide full disclosure to their audience, and speakers with declared competing interests that are selected must provide full content of their presentations beforehand, which also undergoes peer review. Furthermore, sessions evaluations are monitored for perception of bias to ensure CME that is free from commercial influence.

The exhibit hall is entirely separate from our CME sessions. In our exhibit hall, only 30% of the booths are sold to the pharmaceutical industry. Recruiters, residency programs, medical associations, and not-for-profit exhibitors make up most of the booths. There are strict rules in place preventing sampling or giveaways, and exhibitors are allowed to distribute educational material only. Attendance at these booths is not part of accredited CME.

Again, I believe that the situation regarding industry-biased CME has changed dramatically in recent years and differs between Canada and the United States. The guidelines and review processes that we have in place at the College ensure that our accredited CME programs are not abused for commercial interests.

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Correction

It has come to my attention that **Figure 3** in our article "Urinary incontinence in Canada. National survey of family physicians' knowledge, attitudes, and practices" (*Can Fam Physician* 2002;48:86-92) contained an error. The correct figure appears below. I apologize for any confusion that might have arisen from this error.

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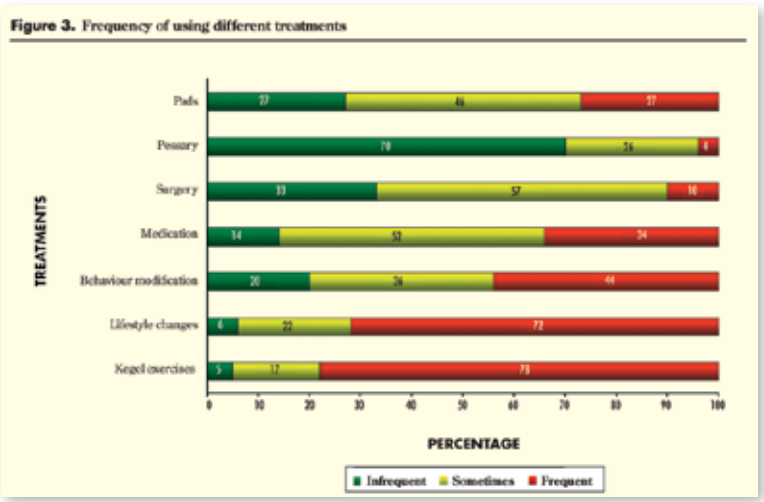

Labour pains

I read with interest the article by Minty et al describing the challenges of providing high-quality analgesia to women in labour in small community hospitals.[1]

The recommended combination of intrathecal (IT) opioids and local anesthetic is said to have a lasting effect of about 4 hours. Hence, if the duration of remaining labour exceeds this, then a period of untreated labour pain will follow. The doses of opioid and local anesthetic recommended in the article are conventional and are limited by side effects such as nausea and hypotension.

Whereas multiple adjuvant agents to prolong analgesia have been investigated (from IT opioids to local anesthetics), none have become widely used owing to side effects.[2] However, IT midazolam is unique among these. This agent has been in use for more than 20 years as part of either a single-shot or continuous spinal-infusion technique. It increases the duration and quality of IT opioid-mediated analgesia in the labour-pain model, with no reported increase in side effects.[3] Intrathecal midazolam has been used in the cesarean section model, where it not only increased the duration of analgesia as compared with IT bupivacaine, but also appeared to prevent nausea.[4] In the surgical model, IT midazolam shows a dose-sparing effect on local anesthetic agents.[5]

It is unfortunate that precise data on the duration of action of IT midazolam are hard to obtain. This is probably because when administered alone it has minimal (or no) detectable effects. Our knowledge is derived from other agents' increase in duration of analgesia. From my own experience and from the available literature, 6 hours of effects from a single dose is a conservative estimate. I have always had access to an epidural (as opposed to a single-shot spinal) for labour-pain relief service, and have only used spinal analgesia as part of a combined spinal-epidural technique or to obtain rapid pain control to facilitate siting an epidural catheter. Having tried many combinations of IT drugs, however, my spinal anesthetic of choice for cesarean section is heavy bupivacaine (9 to 10 mg), with morphine (75 µg), and midazolam (2 mg). I have not had the opportunity to test this in a trial setting but have found that this combination produces rapid onset spinal anesthesia, with minimal nausea and pruritus. I have found no need to include a drug from the fentanyl family, suggesting that the onset of action and prolongation of the effects of morphine are accelerated by the presence of midazolam. If this were true, in the drug combination recommended in the review article[1] sufentanil could be replaced by midazolam in spinal anesthesia for labour pain.

It is difficult to explain why the use of IT midazolam is not more widespread given the ongoing interest in adjuvant agents and it's unique beneficial side-effect profile. Concerns over neurotoxicity are often raised.[6] There has never been a reported case of neurotoxicity in humans, however, and animal studies show very inconsistent results. The largest reported series of patients receiving IT midazolam to date is 547 in a safety study.[7] Further work on continuous spinal infusion of midazolam-containing solutions in perioperative analgesia is ongoing.

If IT midazolam were to be included in single-shot spinal analgesia for labour pain, I believe that the quality of analgesia would be greatly improved at no extra risk and negligible cost (studies to demonstrate whether this does hold true would be relatively easy to conduct). It should be possible to reduce the dose of IT opioid, and sufentanil could probably be omitted. The need for reinstrumentation and alternative analgesic techniques (with their attendant costs and risks) would surely be reduced.

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by e-mail

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