terms of route of administration (for example iv morphine patient-controlled analgesia, epidural analgesia and femoral block for total knee arthroplasty).

The recent articles on the use of single shot psoas compartment block and intrathecal morphine injection for pain relief after total hip arthroplasty (THA) prompted us to conduct our study.

Drs. Paterson and Kuehne explain themselves the anatomical reasons why the psoas block cannot provide similar pain relief than intrathecal morphine: the innervation of the hip does not depend only on the lumbar plexus, but also on the sacral plexus. In their description, they forget that the last thoracic root (T12) innervates the upper part of the incision. However, it is well known that postoperative pain after THA does not depend on cutaneous stimuli.

They combine a psoas block with a single shot sciatic block without considering the risks of Mansour’s block (rectal perforation, iliac vessel or ureter injury). Furthermore, they seem to forget another concern, the systemic toxicity of local anesthetics and/or the risk of massive intrathecal or intravascular injection (their combined sacral and lumbar blocks require 30 mL of 0.5% bupivacaine and 40 mL of prilocaine!).

The volume of ropivacaine 0.475% used in our study (25 mL) is comparable with the volumes recommended for psoas compartment block (0.4 mL·kg⁻¹ of bupivacaine 0.5%) and, thus, cannot be considered low. In addition, there is no study comparing the duration of analgesia with both techniques.

To our knowledge, the only reference regarding continuous psoas compartment block for pain relief after THA is the descriptive study by Capdevila et al. Drs. Paterson and Kuehne do not produce any data to support their assertion that the combination of parasacral and psoas blocks is the ideal technique to provide postoperative analgesia after THA.

Concerning their last comment on the site of postoperative pain after THA, we believe that the only concern with our assessment is not its location but the fact that we did not differentiate between pain at rest and during motion.

Paterson and Kuehne say we are comparing apples and oranges. Nevertheless “primum non nocere” is our duty. Our results show that low dose intrathecal morphine provides better postoperative pain relief than psoas compartment block after THA. The only side effect was urinary retention requiring bladder catheterization. With psoas compartment blocks, disastrous complications have been described with an incidence of 8/1000. Anesthesiologists should always keep in mind the benefit/risk ratio of the techniques they use to provide relief.

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The infraclavicular block is a useful technique for emergency upper extremity analgesia

To the Editor:

The infraclavicular (IC) brachial plexus block is an effective but underused technique. We highlight the interest of such an approach performed in emergency conditions.

An IC coracoid block was performed in the emergency department in a 17-yr-old male with a dislocated elbow complaining of severe pain (100 mm on the visual analogue scale - VAS). After appropriate motor responses at less than 0.6 mA (100 µsec), 7 mL and 23 mL of mepivacaine 1% were injected on the musculocutaneous and the median nerves respectively. Total duration of the procedure was two minutes. Ten minutes later the patient was pain-free with a profound sensory and motor block of the upper limb allowing successful reduction of the dislocation. After immobilization, the patient was sent home.

A 27-yr-old male with a complex fracture and dislocation of the right wrist complained of excruciating pain (100 mm on the VAS) despite 30 mg morphine iv. Forty millilitres of ropivacaine 0.75% were injected through an IC catheter inserted using a nerve stimulator according to the technique described by Wilson.
et al.\textsuperscript{1} Catheter placement lasted five minutes. In the postoperative period, a continuous infusion of 5 mL·hr\textsuperscript{1} of ropivacaine 0.2% with a 5-mL patient-controlled bolus available every 30 min was used. During the first 48 hr of follow-up, only one bolus was necessary for excellent pain control.

In emergency conditions, such as those illustrated in these two cases, the IC approach, that does not require upper limb abduction (often limited by pain), appears to be an interesting alternative to the axillary block. When compared to the interscalene approach, the IC approach provides a greater extent of block (ulnar nerve) with less side-effects.\textsuperscript{2} Pneumothorax is the main risk which decreases significantly with the use of a lateral technique.\textsuperscript{1,3}

The procedure is rapid 3 (2–6) min and latency is short 19.5 (15–30) min [median (range)].\textsuperscript{4} In a recent study, the success rate was improved using a double-stimulation technique with 30 mL of local anesthetic as compared to a single 40-mL injection.\textsuperscript{5} The possibility to insert a catheter is especially interesting in emergency procedures where often the time and the duration of surgery are difficult to anticipate, allowing good analgesia during the perioperative period.

In summary, the infraclavicular block offers a good alternative to the classic axillary approach, especially in emergency conditions when movement of the patient’s arm is reduced.

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References

What do we do with a disconnected epidural catheter? - A response

To the Editor:
We read with interest the letter of Parry\textsuperscript{1} concerning disconnection between the epidural catheter and its luer-lock connector. We would like to comment on a simple technique to reduce if not eliminate this problem.

In our practice, we use an Arrow FlexTip Plus® catheter (Arrow International, Inc., Reading, PA, USA) which is attached to Arrow’s SnapLock\textsuperscript{TM} adapter (Arrow International, Inc., Reading, PA, USA) by a single “snap.” Other catheters with a screw cap may not be tightened enough on the catheter and have the potential to disconnect.

The catheter is then taped with a double loop to the adapter as described by Rivard \textit{et al.}\textsuperscript{2} Once the adapter is connected to the tubing of the epidural pump, the epidural catheter along with the adapter and the pump tubing are looped and taped to the patient’s shoulder. We check if the epidural catheter is secured properly every hour for labour and delivery, and twice a day post-Cesarean section.

We apply this technique for labour epidural, as well as post-Cesarean section epidural-patient controlled analgesia infusion for up to three to four days. We have used this technique for more than 500 patients a year for five years, without any incidence of epidural disconnection.

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