

Correspondence

Leg pains after spinal anaesthesia

To the Editor:

Lately, 5% lidocaine hydrochloride with glucose 7.5% solution (*hyperbaric* or *heavy lidocaine*), when given through a spinal catheter, has been implicated with the *cauda equina* syndrome.^{1,2} Following these reports, hyperbaric lidocaine has been associated with leg pains after spinal anaesthesia with the patients in the lithotomy position.^{3,4} The following case is presented to alert further anaesthetists of this complication.

A 67-yr-old woman weighing 70 kg with no significant medical history and receiving no concurrent drug therapy was to undergo cystoscopy. With the patient in the sitting position, lidocaine 1% solution, 2 ml, was infiltrated into the L₃₋₄ interspace. Lumbar puncture was made on the first attempt with a Spinocan (Braun) 25-gauge needle. Hyperbaric lidocaine 2 ml (Xylocaine heavy, Astra) was injected into the cerebro-spinal fluid and she was placed in the lithotomy position 45 sec later. The level of analgesia reached the umbilicus (T-10). The 40-min surgical procedure was uneventful. When the sensory and motor blocks had recovered, her only complaint involved the urinary catheter. Twelve hours later the patient began complaining of bilateral pain in her thighs and legs extending to just above the ankles. The pains lasted two days and paracetamol *po* provided only limited relief.

It is perplexing why such complaints have appeared in the literature only recently. The few peripheral nerve symptoms described earlier were of motor weakness, hypoesthesia or of paraesthesia.⁵ Perhaps anaesthetists have blamed the lithotomy position, as in the present case. Interestingly, in 1947, Dinsdale warned of the neurotoxic effects of a hyperbaric local anaesthetic solution (amylocaine) used for spinal anaesthesia in combination with the position of the patient.⁶ Although possible mechanisms for the muscle pains have been proposed,^{3,4} their cause remains unclear. Controlled clinical studies are needed to determine the future of hyperbaric local anaesthetic solutions. Until then, anaesthetists might consider avoiding the use of the solution in question.

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Oxygen tank check

To the Editor:

I would like to remind Canadian anaesthetists of the importance of an adequate preuse machine check that confirms the availability of tank oxygen sources.

Several reported incidents across Canada have reminded us that O₂ supply failure for auxiliary tanks can occur even when there is O₂ tank pressure. Most incidents to date have involved Drager Narkomed 2B machines that have an O-Ring valve between the tank cylinder supply and the pipeline supply which is designed to close off tank sources when pipeline pressure is available, and open when pipeline pressure falls. When the O-Rings age they become brittle and the valve fails to open. Regular servicing and replacing of the valve O-Rings is important in preventing the problem, but failures have occurred in machines that have had the manufacturer's recommended servicing.

The ultimate protection is to test the tank O₂ supply in the morning preuse check. It is not good enough to turn on the tank valve and observe adequate pressure. Our recommended procedure is to disconnect the pipeline O₂ and to demonstrate *flow* of O₂ from the tanks, then to reconnect pipeline sources and turn off tank sources.

According to the manufacturer, O-Ring failure will not occur suddenly but develops over a number of months. By testing tank supplies regularly, developing O₂ tank