

possible on the basis that the patient did not develop a post dural puncture headache (PDPH).

Third, the only evidence that the epidural catheter was in the subarachnoid space was the rapidity and density of sensory block achieved by the test dose. However, the aspiration test was negative, the patient did not develop a PDPH and unfortunately, radiological examination could not be carried out because the catheter was displaced. It is possible that the catheter could have been in the subdural space and, although unlikely, the block was an unusual presentation of a subdural block.

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REFERENCE

- 1 Palkar NV, Boudreaux RC, Mankad AV. Accidental total spinal block: a complication of an epidural test dose. *Can Anaesth Soc J* 1992; 39: 1058-60.

"If it squeaks, all is well"

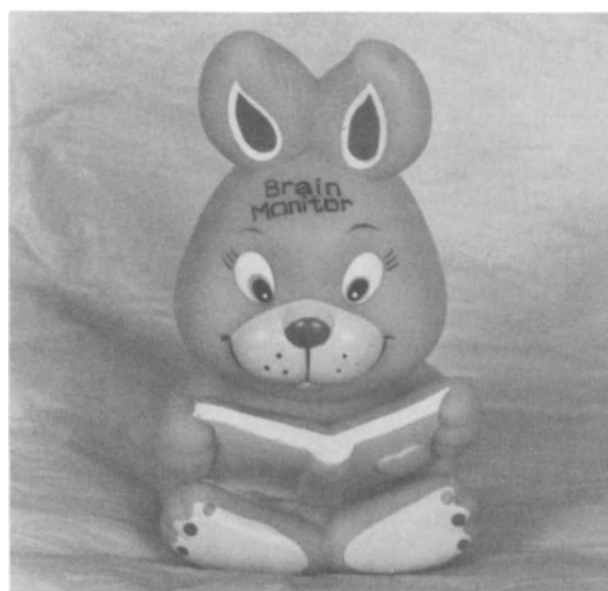
To the Editor:

Brain-specific monitoring during carotid endarterectomy is expensive, labour-intensive and time-consuming. To shunt or not to shunt? is controversial but we agree with the Mayo Clinic's suggestion that shunts should be used in patients who require them during the procedure. We have devised an inexpensive and effective means of monitoring cerebral perfusion for carotid endarterectomy under regional anaesthesia which has helped us determine which patients require shunting.

The patients are informed about the regional anaesthetic technique during the preoperative visit and are taught about a squeezable, squeaky toy (Figure) they will be using during the operation. Benzodiazepines are avoided if possible and small doses of narcotics are used only if necessary before and during surgery.

Deep cervical and superficial cervical plexus block is performed in the operating room using 20-25 ml lidocaine 2% with epinephrine. Then, the patients are given a small squeezable, squeaky toy in the hand contralateral to the operation.

Monitoring in the OR is routine. When the surgeon is ready to clamp the carotid artery the patient is asked to squeeze the toy to produce a squeaky noise. The request is repeated immediately after the clamping and every three to four minutes during the time the carotid artery is clamped. If patient becomes symptomatic and/



FIGURE

or is unable to squeeze the toy then a shunt is inserted for the operation.

By following this technique of selectively shunting the patient by using patient as a monitor, we have not felt the need for more expensive and exhaustive monitoring.

This inexpensive (\$1) Brain Monitor has helped us to manage these patients for carotid endarterectomy under regional anaesthesia.

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