



REVISTA BRASILEIRA DE ANESTESIOLOGIA

Official Publication of the Brazilian Society of Anesthesiology
www.sba.com.br



LETTER TO THE EDITOR

Postdural puncture headache after caesarean section: are preventive strategies worse than the cure?



Cefaleia pós-punção dural para cesárea: as estratégias preventivas são piores do que a cura?

Dear Editor,

Postdural puncture headache (PDPH) was described immediately after the first spinal anesthesia (SA), when Bier himself suffered from a debilitating headache and attributed it to cerebrospinal fluid leakage through the dural rent.¹ With better understanding of the pathophysiology of PDPH, and use of smaller bore needles for SA, the incidence to PDPH has gone down.

Numerous risk factors for PDPH have been described. These include the patient's age, sex and body mass index, the size and type of the spinal needle, the needle orientation and even the operator's skill.^{1,2} The incidence of headache is higher in parturient undergoing caesarean section (CS) under SA. This may be because of the increased elasticity of the dural fibres, which maintains a patent defect in these patients.² The incidence is much higher in an event of accidental dural puncture (ADP) during epidural insertion (76–85%).² This is unfortunate as lower maternal and infant physiological alterations justify preferential practice of regional techniques (SA and epidural anesthesia) in most caesarean sections. PDPH after CS is distressing for the mothers as they expect to feel good after delivery of the baby, and want to take care of the newborn.

Many centers advise recumbency as the prophylaxis of PDPH, with some hospitals not even allowing a pillow or lateral position for as long as 24h after the SA. However, lying down flat for long hours causes pain and distress to the patients. Mothers are unable to feed or nurse the newborn in this position. Both the mother and child need to learn breast-feeding at this stage, and early initiation of breast-feeding is imperative to promote bonding between the mother and

the child. However, nursing the newborn is made difficult in this awkward position, which adds to the stress of the mother and the child.

Supine recumbency does not prevent the occurrence of PDPH after dural puncture.^{2–4} Even after ADP, the management of PDPH is mainly expectant, and prophylactic bed rest is of limited benefit. Contrary to the popular belief, some studies have described higher risk of PDPH if the patient is not immediately mobilized after surgery.² In spite of evidence against the benefits of supine recumbence, physicians continue to advise it routinely after lumbar puncture.⁴ Especially in parturients, such a limitation in mobility and positioning is an obstacle to breast-feed the newborn.⁵

PDPH, if it occurs, is debilitating and should be treated promptly. The majority of these headaches will resolve spontaneously or may be treated conservatively. Few cases may require epidural blood patch. However, keeping the patient supine for prolonged periods after spinal anesthesia, in anticipation of PDPH, causes more agony and misery than the disease it aims to prevent. Not only is this practice highly uncomfortable for the mother and her newborn, it has been proven to be of questionable benefit. In view of the literature against prophylactic bed rest for prevention of PDPH, the protocol of absolute recumbency after SA for CS can be made lenient by the anesthesiologists and obstetricians, to increase the comfort of the mother and her newborn.

References

1. Turnbull DK, Shepherd DB. Post-dural puncture headache: pathogenesis, prevention and treatment. *Br J Anaesth.* 2003;91:718–29.
2. Ghaleb A, Khorasani A, Mangar D. Post-dural puncture headache. *Int J Gen Med.* 2012;5:45–51.
3. Jacobus CH. Does bed rest prevent post-lumbar puncture headache? *Ann Emerg Med.* 2012;59:139–40.
4. Stendell L, Fomsgaard JS, Olsen KS. There is room for improvement in the prevention and treatment of headache after lumbar puncture. *Dan Med J.* 2012;59:A4483.
5. Tully KP, Ball HL. Maternal accounts of their breast-feeding intent and early challenges after caesarean childbirth. *Midwifery.* 2014;30:712–9.

<http://dx.doi.org/10.1016/j.bjane.2014.04.002>

0104-0014/© 2014 Sociedade Brasileira de Anestesiologia. Published by Elsevier Editora Ltda. All rights reserved.

Prakhar Gyanesh^{a,*}, Radhika K. ^a, Manju Sinha^b,
Rudrashish Haldar^{a,c}

^a *Global Hospitals, Chennai, India*

^b *Department of Obstetrics and Gynaecology, Nishant
Hospital, Gaya, India*

^c *Department of Anaesthesia, Gian Sagar Medical College,
Banur, Patiala, India*

* Corresponding author.

E-mails: prakhargyan@gmail.com, p_gyan@yahoo.com
(P. Gyanesh).

Available online 9 May 2014