Received: 8.5.2011

Letter to Editor

Comment on Attari et al: Spinal anesthesia versus general anesthesia for elective lumbar spine surgery: randomized clinical trial

JRMS 2011; 16(5): 712

Te would like to commend Attari et al on their excellent study entitled 'Spinal anesthesia versus general anesthesia for elective lumbar spine surgery: A randomized clinical trial'.1 The authors' findings are consistent with those of Jellish et al² and Rung et al³ who recommend spinal anaesthesia over general anaesthesia for operative procedures on the lumbar spine lasting less than two hours. However, we would like to discuss an important aspect of this study, namely deterioration in neurological status after administration of spinal anesthesia. Hebl et al reported a higher incidence of post-operative neurological complications after central neuraxial blockade in patients with underlying spinal canal pathology. However, in absence of a control group, the authors could not determine whether such complications were because of the anesthetic technique, surgical procedure or natural history

of the disease.⁴ It has been proposed that spinal anesthesia may increase the intra-canal pressure in patients with lumbar canal stenosis and result in ischaemic damage to the spinal cord or nerve roots.⁵

The authors were careful to exclude patients with severe lumbar canal stenosis and arachnoiditis and none of the patients had arachnoid cysts or ankylosing spondylitis. This could probably account for the fact that no patient had post-operative worsening of neurological status. In view of these findings, we would like to emphasize the need for proper patient selection in order to minimise neurological complications. Also, there is need for a multicenter collaborative study to evaluate whether or not neurological complications in patients with pre-existing spinal pathologies could be attributed to spinal anaesthesia before this modality can be declared as a safe alternative to general anaesthesia.

Siddhartha Sharma¹, Bias Dev¹, Mohammad Farooq Butt¹

Conflict of Interests

The author has no conflict of interests.

References

- 1. Attari M, Mirhosseini S, Honarmand A, Safavi M. Spinal anesthesia versus general anesthesia for elective lumbar spine surgery: A randomized clinical trial. Journal of Research in Medical Sciences 2011; 16(4): 524-9.
- **2.** Jellish WS, Thalji Z, Stevenson K, Shea J. A prospective randomized study comparing short- and intermediate-term perioperative outcome variables after spinal or general anesthesia for lumbar disk and laminectomy surgery. Anesth Analg 1996; 83(3): 559-64.
- **3.** Rung GW, Williams D, Gelb DE, Grubb M. Isobaric spinal anesthesia for lumbar disk surgery. Anesth Analg 1997; 84(5): 1165-6.
- **4.** Hebl JR, Horlocker TT, Kopp SL, Schroeder DR. Neuraxial blockade in patients with preexisting spinal stenosis, lumbar disk disease, or prior spine surgery: efficacy and neurologic complications. Anesth Analg 2010; 111(6): 1511-9.
- 5. Hales JR, Yeo JD, Stabback S, Fawcett AA, Kearns R. Effects of anesthesia and laminectomy on regional spinal cord blood flow in conscious sheep. J Neurosurg 1981; 54(5): 620-6.

¹⁻ Department of Orthopaedic Surgery, Government Medical College and Associated Hospitals, Jammu, India. Corresponding Author: Siddhartha Sharma E-mail: sids82@gmail.com