

## Comment on “Anaesthetic management of a patient with amyotrophic lateral sclerosis for transurethral resection of bladder tumour”

Sir,

I read with interest the case reported by Thampi *et al.*,<sup>[1]</sup> and I would like to congratulate the authors. However, it is important to note some aspects about the anaesthetic management of patients with amyotrophic lateral sclerosis (ALS).

The authors describe a 45-year-old male patient diagnosed to have ALS with weakness of upper and lower limbs and pulmonary compromise. General anaesthesia

and bilateral obturator block were administered. The authors claim that patients with respiratory muscle weakness may present with fatigue, progressing to shortness of breath triggered by decreasing levels of activity and lying flat. The authors confirm that although neuraxial blocks are not contraindicated, there is always the fear that the administration of the local anaesthetic close to the nerve or needle trauma could exacerbate pre-existing disease symptoms. Nevertheless, it is important to note that:

1. It is not possible to state that neuraxial anaesthesia exacerbates the disease and if it does, the mechanism is unknown,<sup>[2]</sup>
2. Needle trauma may probably incite neurological sequel in ALS patients as well as in healthy patients,
3. Evidence has demonstrated that spinal and epidural blocks seem to be safe in these patients, since they avoid manipulation of the airway and respiratory complications.<sup>[2-4]</sup> In an innovative study, Kitoh *et al.* administered epidural block associated with the blockade of lumbar sympathetic ganglia for the treatment of ALS in a patient and observed improvement of the symptoms of the affected lower limb. Few other studies have confirmed the safety of performing neuraxial blockades on patients with ALS and other neurological diseases,<sup>[5]</sup>
4. Respiratory failure is the main cause of death in patients with ALS. Patients with medullar lesion may also present prolonged apnoea after general anaesthesia.<sup>[2,4]</sup>

Based on current literature, there is no definite evidence about the best anaesthetic technique for patients with ALS. Each case should be managed individually. At present, epidural and spinal anaesthesia are acceptable techniques for patients with ALS.

**Adriano BS Hobaika, Artur Palhares Neto<sup>1</sup>**

Master of Science in Medicine, Staff Anaesthesiologist of Mater Dei Hospital, <sup>1</sup>Coordinator of the Department of Anaesthesiology of Mater Dei Hospital, Professor of Anaesthesiology UFMG, Belo Horizonte, Brazil

**Address for correspondence:**

Dr. Adriano BS Hobaika,  
Rua Gonçalves Dias, 2700 (Bloco I) CEP 30.140 - 093,  
Belo Horizonte, Brazil.  
E-mail: hobaika@globo.com

**REFERENCES**

1. Thampi SM, David D, Chandy TT, Nandhakumar A. Anesthetic management of a patient with amyotrophic lateral sclerosis for transurethral resection of bladder tumor. *Indian J Anaesth* 2013;57:197-9.

2. Hobaika AB, Neves BS. Combined spinal-epidural block in a patient with amyotrophic lateral sclerosis: Case report. *Rev Bras Anesthesiol* 2009;59:206-9.
3. Moret JE, Di Gioia M, Montaruli V. Subarachnoid anesthesia in a case of cesarean section in a 27-year old patient with amyotrophic lateral sclerosis, in the 39<sup>th</sup> week of pregnancy. *Minerva Anesthesiol* 1991;57:747-8.
4. Park KB, Son B, Hwang DY, Jeon Y. Spinal anesthetic management for discectomy in a patient with amyotrophic lateral sclerosis-A case report-. *Korean J Anesthesiol* 2012;63:547-9.
5. Kitoh T, Kobayashi K, Ina H, Ofusa Y, Otagiri T, Tanaka S, *et al.* Effects of lumbar sympathetic ganglion block for a patient with amyotrophic lateral sclerosis (ALS). *J Anesth* 2006;20:109-12.

Access this article online	
Quick response code	Website: www.ijaweb.org
	DOI: 10.4103/0019-5049.123355