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LETTERS TO THE EDITOR

Ultrasound-guided facet block



Bloqueio da faceta guiado por ultrassom

Dear Editor:

We read the article “Ultrasound-guided facet block to low back pain: a case report” written by Ana Ellen Q. Santiago et al.¹ with interest. The authors have reported a case report about a patient with bilateral facet osteoarthritis and performing facet block with ultrasound-guided.¹ Thanks to the authors for conducting such a great study, which is successfully designed and well documented. We believe that these findings will enlighten further studies about ultrasound-guided facet block and comparing ultrasound and fluoroscopy in pain therapies.

Lumbar facet osteoarthritis is one of the major causes of low back pain and it also cause referred pain in the lower limb. This source of pain cannot be diagnosed by only clinical examination or radiologic findings.² The facet joint block is performed for patients with low back pain and with imaging studies determining facet osteoarthritis.¹ The facet joint block is usually performed under fluoroscopy or computed tomography (CT). The block performed under CT or fluoroscopic guidance enhances the accuracy and success rate, but there are disadvantages such as the exposure to radiation and the high cost as compared with ultrasonography.³

Recent advances in ultrasound improved significantly spinal sonoanatomy. Therefore, currently ultrasound can be used to determine or guide central neuroaxial blocks and also peripheral regional blocks with greater success,⁴ because ultrasound is a non-invasive, safe, and simple tool and it also does not involve exposure to radiation, besides providing real-time images, and it does not have side effects.⁵

Many studies comparing ultrasound and fluoroscopy at facet joint block reported that ultrasound-guided facet block can be performed with a high success rate and clinical outcome comparable with that of a fluoroscopic-guided block and also the advantages of not involving exposure to radiation provides the potential for use of ultrasound guidance as an alternative to the conventional method.^{2,3,6}

We think that ultrasound-guided identification of the correct segment for facet nerve block has not been fully

described in studies and therefore this method requires further studies regarding improvement of approach method for ultrasound-guided facet block by defining the essential ultrasound views and sonographic landmarks necessary in the procedure.

Conflicts of interest

The authors declare no conflicts of interest.

References

1. Ana QS, Plinio CL, Elmiro MB, et al. Ultrasound-guided facet block to low back pain: a case report. *Rev Bras Anesthesiol.* 2014;64:278–80.
2. Jae-Kwang S, Jin-Cheon M, Kyung-Bong Y, et al. Ultrasound-guided lumbar medial-branch block: a clinical study with fluoroscopy control. *Reg Anesth Pain Med.* 2006;31:451–4.
3. Dae HH, Dae MS, Tae KK, et al. Comparison of ultrasonography and fluoroscopy-guided facet joint block in the lumbar spine. *Asian Spine J.* 2010;4:15–22.
4. Demirci A, Mercanoglu E, Türker G, et al. Iliohypogastric/ilioinguinal nerve block in inguinal hernia repair for postoperative pain management: comparison of the anatomical landmark and ultrasound guided techniques. *Rev Bras Anesthesiol.* 2014;64:350–6.
5. Ilana EN, Thiago NF, Arthur RS, et al. Caudal epidural anesthesia: an anesthetic technique exclusive for pediatric use? Is it possible to use it in adults? What is the role of the ultrasound in this context? *Rev Bras Anesthesiol.* 2011;61:95–109.
6. Heungun J, Seonghun J, Sangho A, et al. The validation of ultrasound-guided lumbar facet nerve blocks as confirmed by fluoroscopy. *Asian Spine J.* 2012;6:163–7.

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