

## Is It Safe to Evaluate Pedicle Screw Position with Postoperative Tomography?

Pedikül Vidası Pozisyonunu Postoperatif Tomografi ile Değerlendirmek Güvenli mi?

Omer ERSEN<sup>1</sup>, Serkan BILGIC<sup>2</sup>

<sup>1</sup>Maresal Cakmak Military Hospital, Department of Orthopaedics, Erzurum, Turkey <sup>2</sup>GATA Haydarpasa Training Hospital, Department of Orthopaedics, Istanbul, Turkey

Corresponding Author: Omer ERSEN / E-mail: merschenn@yahoo.com

KEYWORDS: Pedicle screw, Pedicle breach, Computerized tomography ANAHTAR SÖZCÜKLER: Pedikül vidası, Pedikül sıyırması, Bilgisayarlı tomografi

## Dear editor,

We recently read with great interest the article titled "Accuracy of Pedicle Screw Placement in Thoracolumbar Spine with Conventional Open Technique" by Borcek et al. (1). We congratulate the authors for reporting their results. Borcek et al. have reported conventional open technique results of thoracolumbar spine procedures that were similar to those with image-guided techniques in the literature (1).

The open technique is safe method as Borcek et al. reported but it may not be safe to evaluate the screw position with postoperative computerized tomography in every patient. In contrast to the studies they cited, Borcek et al. did not mention reduction in radiation exposure with image-guided techniques (1, 3). Nottmeier et al. reported reduction of radiation exposure with navigation systems (2). Tian and Xu found minimal to no radiation exposure to the surgeon or operating room staff as there was no active fluoroscopy (3). Another point that should be mentioned is that the authors did not classify pedicle breach according to etiology. We think that degenerative scoliosis could have shown more association with pedicle screw malposition.

## REFERENCES

- Borcek AO, Suner HI, Emmez H, Kaymaz M, Aykol S, Pasaoglu A: Accuracy of pedicle screw placement in thoracolumbar spine with conventional open technique. Turk Neurosurg 24:398-402, 2014
- Nottmeier EW, Seemer W, Young PM: Placement of thoracolumbar pedicle screws using three-dimensional image guidance: Experience in a large patient cohort. J Neurosurg Spine 10:33-39, 2009
- 3. Tian NF, Xu HZ: Image-guided pedicle screw insertion accuracy: A meta-analysis. Int Orthop 33: 895-903, 2009