

# Editorial Commentary: Neuropathy After Fascia Iliaca Blocks for Hip Arthroscopy: Should We Just Blame Anesthesia?



William M. Weiss, M.D., M.Sc., Editorial Board

**Abstract:** Hip arthroscopy has been the subject of recent controversy in the literature with regard to outcomes and complications. The current investigation demonstrates a significant increase in the risk of postoperative medial thigh neuropathy with fascia iliaca block. Although the association between lateral thigh and groin numbness with traction and anterior portal instrumentation cannot be ruled out, this investigation begs the question: Should we just blame anesthesia? Probably not, as regional blocks, portal placement, and traction are all likely to play some role.

See related article on page 2825

The literature surrounding outcomes and complications of hip arthroscopy continues to evolve. In “Traction Time, Force and Postoperative Nerve Block Significantly Influence the Development and Duration of Neuropathy Following Hip Arthroscopy,” Bailey, Stephens, Adeyemi, Xu, Presson, Aoki, and Maak<sup>1</sup> explore postoperative neurologic complications and their association with both fascia iliaca blocks and intraoperative traction.

The primary finding of this investigation was the identification of a 3-fold increase in medial thigh numbness after fascia iliaca block. Almost half of patients (47%) reported some numbness postoperatively, but 22% had a fascia iliaca block, which was a significant predictor of medial thigh neuropathy after adjusting for traction force and time. There was no association of traction force and time with overall neuropathy, but there may be a subset of patients with both lateral thigh and groin numbness associated with increased traction time and instrumentation through the midanterior portal.

In a recent systematic review, perioperative nerve blocks for hip arthroscopy were demonstrated to be

effective, with a rate of neuropathy of only 2.8%.<sup>2</sup> In another study that did not specifically discuss nerve blocks, the rate of reported nerve dysfunction after hip arthroscopy was 46% in the first week, but this decreased to only 18% at 1 year.<sup>3</sup> The authors of the current investigation raise the possibility that the fascial plane used for postoperative block may be disrupted by the procedure, increasing the risk of a potential “double-hit” phenomenon resulting in medial thigh numbness.

The authors of the current investigation should be recognized for a well-designed study; however, limitations of possible type II error and inadequacies in the classification of neuropathy remain. Although the link between traction and neuropathy is poorly defined and controversial, this investigation demonstrates an increased risk of medial thigh neuropathy with fascia iliaca block and begs the question: Should we just blame anesthesia?

Unfortunately, the answer is not entirely, as it seems regional blocks, portal placement, and traction are all likely to play some role in the limited, but present, risk of neuropathy after hip arthroscopy.

## References

1. Bailey TL, Stephens AR, Adeyemi TF, Xu Y, Presson AP, Aoki SK, Maak TG. Traction time, force and postoperative nerve block significantly influence the development and duration of neuropathy following hip arthroscopy. *Arthroscopy* 2019;35:2825-2831.

The author reports no conflicts of interest in the authorship and publication of this commentary. Full ICMJE author disclosure forms are available for this article online, as [supplementary material](#).

© 2019 by the Arthroscopy Association of North America  
0749-8063/19725/\$36.00

<https://doi.org/10.1016/j.arthro.2019.06.014>

2. Kay J, de Sa D, Memon M, Simunovic N, Paul J, Ayeni OR. Examining the role of perioperative nerve blocks in hip arthroscopy: A systematic review. *Arthroscopy* 2016;32:705-715.
3. Dippmann C, Thorborg K, Kraemer O, Winge S, Holmich P. Symptoms of nerve dysfunction after hip arthroscopy: An under-reported complication? *Arthroscopy* 2014;30:202-207.