Neurosurgical Forum

LETTERS TO THE EDITOR

Safety of epidural steroids during lumbar spine surgery

TO THE EDITOR: I read with great interest the paper by Sellin et al.² (Sellin JN, Vedantam A, Luerssen TG, et al: Safety of epidural triamcinolone acetonide use during lumbar decompression surgery in pediatric patients: an association with delayed pseudomeningocele formation. *J Neurosurg Pediatr* 17:667–671, June 2016). While none of the patients who had steroids after minimally invasive or open discectomies developed CSF leak, 71% of those who had epidural steroids after a multilevel laminectomy developed pseudomeningoceles. The authors recommended against using triamcinolone after multilevel laminectomies.

We had a similar experience with adult patients after microdiscectomy. Three adults underwent an uneventful microdiscectomy for lumbar disc herniations in 2014 or 2015 and were discharged home. They did not have any intraoperative durotomy or CSF leak and all three had epidural triamcinolone placed in the operative bed before closure. All three patients presented in a delayed manner (range 1 week to 6 months) with pseudomeningocele that needed operative repair.

I stopped administering triamcinolone and have not encountered any cases of delayed CSF leak since the three involving the above patients. Because I do not use epidural steroids after multilevel laminectomies, I cannot comment on that specific conclusion by the authors. These delayed leaks prompted us to perform a meta-analysis on epidural steroid use, and we found that while these agents decreased postoperative pain in the short term, there was a non-significant trend toward a higher infection rate in patients who were treated with them.¹ There were not enough data to comment on CSF leak rates.

I agree with the proposed mechanism of inhibiting epidural inflammation and scarring. Many spine surgeons use intraoperative epidural steroids in their practice for better pain relief and to potentially decrease epidural

scarring, and I commend the authors on bringing this issue to light.

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References

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2. Sellin JN, Vedantam A, Luerssen TG, Jea A: Safety of epidural triamcinolone acetonide use during lumbar decompression surgery in pediatric patients: an association with delayed pseudomeningocele formation. *J Neurosurg Pediatr* 17:667–671, 2016

Disclosures

The author reports no conflict of interest.

Response

We thank Dr. Faiz Ahmad for his interest in our study and for affirming our experience in his own anecdotal observations. We do not proudly publish our complications for all to see; as surgeons, it is difficult to admit our shortcomings and failings. However, we were compelled to publish our series of complications honestly and transparently to warn other practitioners and colleagues of the use of epidural triamcinolone acetonide; we felt a sense of duty to our present and future patients. It is important to remember our own complications, but perhaps, it is even more important to remember those of others.

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