Lumbar Cerebrospinal Fluid Drains for Thoracic Endovascular Aneurysm Repair

Common Practice or Standard of Care?

To the Editor:

The recent description by Awad et al., 1 accurately reports **L** an interesting, and thankfully rare, complication of a neuraxial subdural hematoma complicating lumbar cerebrospinal fluid (CSF) drain placement in a patient undergoing thoracic endovascular aortic aneurysm repair. It also states that CSF drain placement is indicated as "a standard of care" in open and thoracic endovascular aortic aneurysm repair cases in order to reduce the risk of spinal cord ischemia. Although there are published guidelines recommending the use of CSF drains in these surgical settings,2 the evidence supporting their use is arguably rather weak (levels B and C)³ and is either quite dated,³ or based largely on expert opinion.4 Accordingly, the uptake of lumbar CSF drain use is somewhat irregular and to suggest that it should be a "standard of care" (i.e., what the average prudent practitioner should be practicing given similar circumstances) is probably inaccurate. Although lumbar CSF drain placement may be commonplace in many centers, to state that it is a standard of care, and thus implicitly suggest that it should routinely be done, probably overemphasizes the utility of CSF drains in these settings.

Competing Interests

The author declares no competing interests.

Hilary P. Grocott, M.D., F.R.C.P.C., F.A.S.E., Department of Anesthesiology, Perioperative and Pain Medicine, University of Manitoba, Winnipeg, Manitoba, Canada. hgrocott@sbgh.mb.ca

References

1. Awad H, Huang T, Tili E, Bourekas E: Spinal subdural hematoma after spinal drain for endovascular thoracic aortic aneurysm repair. Anesthesiology 2018; 128:1004

- 2. Hiratzka LF, Bakris GL, Beckman JA, Bersin RM, Carr VF, Casey DE Jr, Eagle KA, Hermann LK, Isselbacher EM, Kazerooni EA, Kouchoukos NT, Lytle BW, Milewicz DM, Reich DL, Sen S, Shinn JA, Svensson LG, Williams DM; American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines; American Association for Thoracic Surgery; American College of Radiology; American Stroke Association; Society of Cardiovascular Anesthesiologists; Society for Cardiovascular Angiography and Interventions; Society of Interventional Radiology; Society of Thoracic Surgeons; Society for Vascular Medicine: 2010 ACCF/ AHA/AATS/ACR/ASA/SCA/SCAI/SIR/STS/ SVM guidelines for the diagnosis and management of patients with Thoracic Aortic Disease: A report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines, American Association for Thoracic Surgery, American College of Radiology, American Stroke Association, Society of Cardiovascular Anesthesiologists, Society for Cardiovascular Angiography and Interventions, Society of Interventional Radiology, Society of Thoracic Surgeons, and Society for Vascular Medicine. Circulation 2010; 121:e266-369
- 3. Awad H, Ramadan ME, El Sayed HF, Tolpin DA, Tili E, Collard CD: Spinal cord injury after thoracic endovascular aortic aneurysm repair. Can J Anaesth 2017; 64:1218–35
- 4. Etz CD, Weigang E, Hartert M, Lonn L, Mestres CA, Di Bartolomeo R, Bachet JE, Carrel TP, Grabenwöger M, Schepens MA, Czerny M: Contemporary spinal cord protection during thoracic and thoracoabdominal aortic surgery and endovascular aortic repair: A position paper of the vascular domain of the European Association for Cardio-Thoracic Surgery. Eur J Cardiothorac Surg 2015; 47:943–57

(Accepted for publication October 17, 2018.)