believed they were effective. In demonstrating the variability across centers performing complex aortic surgery, the study highlights areas in need of more research or best practice recommendations.

The notable limitations of the study, which the authors thoroughly address, relate primarily to the inherent issues with bias in survey analysis. Self-reporting may introduce issues due to respondents providing answers that they believe conform with a perceived norm rather than their actual practice patterns. Recent cases or complications may result in recall bias, with respondents providing answers that reflect their recent experience rather than their overall true practice pattern. Despite these limitations, the authors provide valuable insight into current real-world practices in the management of complications in patients undergoing complex thoracic aortic surgery.

References

Commentary: Call for teamwork to be a class I, evidence-level A recommendation in all guidelines

Ourania Preventza, MD,a,b and Jessica G. Y. Luc, MDc

Spinal cord ischemia is one of the most dreaded adverse events after thoracoabdominal aortic surgery, with considerable personal and financial implications not only for patients, but also for their families and for society. On behalf of the Canadian Thoracic Aortic Collaborative and the Cardiovascular Critical Care Society, Chung and coauthors have designed a survey regarding current practices around the prevention and management of spinal cord ischemia after aortic surgery. The authors must be congratulated for their outstanding effort that, importantly, brings to light the significant variability among surgeons and intensivists (which included anesthesiologists) in Canada regarding the
perioperative management of aortic disease. This variability is particularly striking with regard to key elements in preventing spinal cord ischemia, such as the use of a lumbar drain (class I, evidence level B).² This variability continues to a lesser degree regarding relatively common sense measures, such as replacing lumbar drains after removal if the patient develops symptoms of spinal cord ischemia; agreement was 71% among cardiac intensive care unit (ICU) consultants, compared with 95% among surgeons. Interestingly, there was also variability regarding other preventive measures that are much simpler than placing a lumbar drain, such as intraoperative and postoperative blood pressure management. Three-quarters of surgeons agreed that hypertension should be induced after stent graft placement during a thoracic endovascular aortic repair procedure, and >80% of both ICU consultants and surgeons agreed that mean arterial pressure >80 or 90 mmHg should be instituted in the ICU postoperatively. Although these percentages showed “general agreement,” given the importance as well as the simplicity of perioperative blood pressure management (compared with lumbar drain placement), these percentages should have been close to 100% among surgeons, intensivists, and anesthesiologists.

That said, this questionnaire did not consider patient-specific preoperative, intraoperative, and postoperative characteristics that could have led surgeons or intensivists to answer specific questions differently according to their primary specialty background.

Given the variability seen among different types of surgeons (eg, vascular, cardiac), intensivists, and anesthesiologists, improving patient outcomes may require a completely different approach that emphasizes teamwork and the presence of an aortic team.³⁻⁵ Spinal cord ischemia is multifactorial, and there is no single perioperative maneuver that can prevent its occurrence. Certainly, specific surgeon expertise is crucial to how these procedures are conducted. But without a doubt, having an aortic team ready that includes cardiac and/or vascular surgeons, anesthesiologists, intensivists, nurses, physician assistants, and other health care providers who care for these patients will produce care far superior to what any one individual’s expertise can provide. The collective intelligence and dedication of a team are imperative to ensuring the best care for these patients.

Perhaps any survey about preventing spinal cord ischemia in aortic surgery should be given not to individuals but rather to aortic teams from different centers, so that each of us can learn from their collective knowledge and disseminate that knowledge. Using the best available evidence, the aortic team should determine such practices as whether to place a lumbar drain and for how long, perioperative management of blood pressure, the need for prophylactic subclavian carotid bypass, and intraoperative temperature management. Spinal cord ischemia being multifactorial, who better to decide its management than aortic teams from centers of excellence instead of individuals?

References