Who should be “let in” when managing the thoracic outlet?

Usman Ahmad, MD, and Sudish C. Murthy, MD, PhD

From the Department of Cardiothoracic Surgery, Heart and Vascular Institute, Cleveland Clinic, Cleveland, Ohio.

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Address for reprints: Usman Ahmad, MD, Department of Cardiothoracic Surgery, Heart and Vascular Institute, Cleveland Clinic, Cleveland, OH 44195 (E-mail: ahmadu@ccf.org).

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Central Message

It is rare, every surgeon manages it differently, there is no specific training requirement, patients are difficult to manage, there is a lot of buzz about it, and lawyers are all over it—it is a setup for trouble!

See Article page 1318.

There are certain areas in our specialty that have attracted more public attention than what would be considered appropriate for their clinical effect. This is usually driven by their societal and economic effects and possible legal ramifications. Thoracic outlet syndrome and its complications, vagaries of treatment modalities, and their complications is one such example. In a recent review of the National Surgical Quality Improvement Program database only 1431 patients were identified as having undergone surgery over a 10-year time period with the sample drawn from several hundred hospitals across the United States.¹ However, a MedLine search of “thoracic outlet syndrome” yields more than 2500 articles. It surprises no one that this disease is at the center of countless disability claims and protracted legal negotiations.

Differences in surgical practice and outcome measures of success add to the challenge of standardization of care in this uncommonly encountered clinical problem. A clear correctable mechanical problem, in the form of presence of a cervical rib, is present in a small percentage of patients.² Resection of the first rib is otherwise used to decompress the thoracic outlet for vascular and neurologic subtypes of the disease and interestingly this surgery is performed in the United States by surgeons from 7 different subspecialties, including general surgery. Although vascular surgeons lead the charge and perform most of these surgeries across the country,¹ litigation related to surgery for thoracic outlet syndrome was the most common malpractice claim involving thoracic surgery.³

Standardization of care, with input from physicians from all relevant specialties, provides the most robust and sustainable platform for managing such complex patients. Dr Burt has shared with us an excellent example of multidisciplinary standardization.⁴ Other institutions have expanded the multidisciplinary involvement to include vascular medicine and vascular surgery colleagues. Some groups engage a vascular and a thoracic

surgeon for every patient and the surgery is performed as a combined case. Because of personal constraints this more labor-intensive collaboration can be challenging, however, in this complex patient population it is certainly.

As we become more specialized going forward and focus on niche diseases within our subspecialty we do end up losing some breadths of experience, especially during training. Because of the uncommon nature of the problem most vascular and thoracic surgery training program clinics across the country will likely identify themselves as low-volume centers for managing thoracic outlet syndrome patients. Certainly in thoracic surgery training there is no specific minimum requirements for being considered proficient in managing thoracic outlet syndrome. Under these circumstances it is of paramount importance for thoracic surgeons to approach and manage these patients as part of a multidisciplinary team.

Because vascular surgeons are doing the lion's share of these surgeries, as a specialty we should really ask ourselves if we should be performing surgery on these patients? And if we are going to continue to offer our services to these patients we should strive to bring the same level of technical and scientific expertise to this group as we do to other patient groups such as those with coronary artery disease or lung cancer. If we want to be “let in” in the thoracic outlet, we have to be all in with specific attention paid to

appropriate training, certification, and multidisciplinary engagement.

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