Commentary Ceppa

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Commentary: The great equalizer

DuyKhanh P. Ceppa, MD

It has been more than 25 years since the first large case series of thoracoscopic lobectomy was published. Since then, the safety of this technique, along with its clinical benefit compared with thoracotomy lobectomy, has been irrefutably established. As the volume of thoracoscopic lobectomy increased, thoracotomy lobectomy volume decreased. Concurrently, robotic lobectomy was introduced as an alternative minimally invasive lobectomy technique and, comparatively, has been more readily adopted than thoracoscopic lobectomy.

Thoracoscopic lobectomy has known risks and complications, including 26% any and 8% pulmonary complications, 8% prolonged air leak, 7% atrial fibrillation, 1% bleeding, 2% transfusion, and 1% 30-day mortality rates.² Reported conversion rates have ranged from 3% to 20%, and the reported learning curve for performing an adequate thoracoscopic lobectomy is 50. 1,6,7 While minimally invasive lobectomy is considered the standard of care for early-stage lung cancer, especially for stage I disease, the complexity of these procedures must not be forgotten nor taken for granted.

In their video submission, "Potential Surgical Challenge: Hooking the Staple Stump," Matsui and Marakawa⁸ remind us of just that point. As the dissection is proceeding along beautifully and the audience admires the anatomy, the stump of an already-ligated branch of the pulmonary artery gets caught in the I-piece of the Endo GIA stapler load. Any thoracic surgeon cannot help but cringe witnessing this occurrence. Thankfully, the surgeons identified the error before undue tension is placed on the stump to cause avulsion; the stump is gently detached from the stapler load; and

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Blood splatter from vascular injury during minimally invasive surgery.

CENTRAL MESSAGE

While thoracoscopic lobectomy has been around for more than 25 years, its complexity remains.

the procedure continues without event. As simple as this video and the solution to this technical problem may seem, it serves as a refreshing reminder that no matter how experienced one may be at thoracoscopic lobectomy, this is a challenging procedure, and adverse events happen. A surgeon's astuteness in prevention, early identification, and measured reaction to the adverse event is the distinct mark of a master surgeon.

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