In the eye of the beholder

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The problem of postthoracotomy pain syndrome has long vexed thoracic surgeons, with as many as 50% of patients reporting persistent pain after thoracic surgery.¹ Although video-assisted thoracoscopic surgery (VATS) techniques have demonstrated improvement relative standard thoracotomy approaches in terms of acute pain control and inflammatory cytokine levels,²⁻⁴ there is a relative paucity of data specific to robotic-assisted thoracoscopic surgery (RATS).

In this month's issue of the *Journal*, Kwon and colleagues⁵ present a single-institution analysis of patient-reported pain outcomes and narcotic use after thoracic surgery. In this study, they compared the minimally invasive RATS and VATS approaches with each other, as well as with open thoracotomy. Importantly, this is the first published report of acute and chronic pain outcomes to compare RATS with other approaches by means of a validated survey instrument. The prospective use by Kwon and colleagues⁵ of the Pain DETECT questionnaire to assess for neuropathic pain makes sense and adds validity to their findings.

In contrast to the findings of Louie and associates,⁶ Kwon and colleagues⁵ found no significant differences in acute pain between patients undergoing lobectomy by VATS and RATS. It is also interesting that a higher proportion of patients who underwent RATS lobectomy felt that the surgical approach affected their pain, and in a positive manner. Could it be that RATS is perceived by patients as "state of the art" and therefore better? Conversely, compared with patients who underwent either type of minimally invasive surgery, a higher proportion of patients who underwent thoracotomy reported that the approach negatively affected their pain. As expected, patients who were receiving preoperative narcotics, as well as those with poorly controlled acute pain (on postoperative day 1), had a higher incidence of chronic pain.

There are some remaining knowledge gaps not addressed by this study. For example, the role of other conditions, such as anxiety, depression, or other chronic illnesses, in the development of postthoracotomy (or post-minimally invasive thoracic surgery) pain has yet to be clearly elucidated. Finally, although the use of a validated survey instrument for assessing chronic pain by Kwon and colleagues⁵ is

No pain...we all gain.

Central Message

Minimally invasive approaches are associated with decreased pain after lung resection, but there is no clear evidence that either robotic or VATS is superior to the other.

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laudable, others have shown that a neuropathic component accounts for only about half of the chronic pain experienced by patients after thoracic surgery.¹

Still, this is a notable step in reaffirming many of the benefits of minimally invasive thoracic surgical approaches relative to thoracotomy. At this point, the relative "beauty" of VATS over RATS (or vice versa) remains in the eye of the beholder. Further study is necessary to elucidate more clearly the differences and relative benefits of one approach versus the other, and these will undoubtedly be exciting developments for those in the general thoracic surgical community to watch.

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