Is Video-Assisted Thoracoscopic Lobectomy Inferior to Open Lobectomy Oncologically?

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During the last 4 decades, slow but steady progress has been made in the overall survival of patients with non-small cell lung cancer (NSCLC). Yet even with all the improvements in care in chemotherapy, radiotherapy, and surgical techniques, the overall survival is still less than 20%. No treatment should jeopardize this slow, but real progress. The goal of treatment of cancer is—number one—to cure cancer.

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Every so often, a disruptive technology comes along to change the way we treat patients. Video-assisted thoracic surgery (VATS) is such a technology. It is not a new treatment, but a new technique to achieve removal of lung-containing cancer. VATS has become increasingly common and, in many centers, represents more than 50% of the procedures performed for non-small cell lung cancer. In my opinion, it has passed the phase I and phase II trials widely accepted to evaluate new treatments. Feasibility has been established, and VATS shows promise. It has proven to be safe and well tolerated. What are lacking, however, are adequately powered, randomized prospective studies to evaluate VATS as an equivalent cancer operation to open procedures (phase III).

Many single-institution studies claim VATS lobectomy is equivalent to open procedures by comparing with historical data. This procedure must be free of complications, shorter length of stay, and returns patients to normal activities more quickly. It must, at least, have equivalent survival to open lobectomy. We must not give back the few hard-won percentage points of survival that have been gained over the last 4 decades.

Our patients deserve to know the truth. If VATS lobectomy is equivalent and achieves all that it claims in lower morbidity and quality of life, it should become the gold standard. If VATS lobectomy does not achieve equal or superior survival, the patient should know this to make informed decisions: many may still choose the less invasive approach, but at least they will be informed.

Randomized prospective clinical trials often shed light on the merits of new procedures or treatments. Our assumptions and biases are put to rest. New information often comes to light about exact indications and contraindications. We must not rely on the limitation of single-institution studies and historical data. This procedure must be broadly applicable and not the domain of a few experts for it to become the new gold standard. Most importantly we can't be wrong about its efficacy as a cancer operation.

The time has come for a randomized prospective trial comparing VATS with open lobectomy for clinical stage I lung cancer.

References


