

Video-atlas of thoracoscopic formal lung resections emulating traditional open techniques - Editor's comments

The following video compilation by Dr Demmy is a valuable atlas of thoracoscopic lobectomy, both for thoracic trainees, for whom this approach will become increasingly routine, and for senior surgeons wishing to expand and evolve their surgical repertoire for lung cancer surgery. The videos, with excellent clarity and appropriate narrative, sequentially take the viewer through five individual lobectomies, which are accompanied by a helpful side bar that demonstrates the correct placement of the thoracoscope and other instruments at every stage. Surgeons who are currently using a standard thoracotomy will recognise the exposures and patient positioning. Those used to performing some VATS procedures will be familiar with the triangulation technique used in these videos with 2 ports and an additional access incision.

Two decades after its first description, lung resection by video-assisted thoracoscopic surgery (VATS) has not only answered the initial criticisms questioning its alignment with the principles of surgical oncology (1), but has survived through to reach for the higher ground with a growing evidence base for its superiority over its more invasive counterpart of a larger and rib spreading conventional thoracotomy in the management of early-stage non-small cell lung cancer. Advantages of less pain, less blood loss, less frequent post-operative complications, shorter hospital stay, earlier post-operative recovery, better post-operative lung function and an earlier facilitation for the timely delivery of adjuvant therapy when necessary, are increasingly reported in the literature (2-5). The thoroughness of mediastinal lymph nodes sampling is not compromised by thoracoscopy. More importantly, the medium and long-term survival following VATS lobectomy is not only comparable (6-9), but may even be superior to that following open thoracotomy (10).

These comparisons have been made with the standard postero-lateral thoracotomy, which entails significant muscle division and rib-spreading. Some surgeons are limiting this by moving towards a more anterior incision, while others are embracing a hybrid approach through a limited thoracotomy with thoracoscopic assistance. Evidence that VATS lobectomy causes less inhibition of underlying immune function when compared to lung resection via a thoracotomy (11), would further support a survival advantage with the less invasive approach and adds impetus to embracing this technology on a larger scale than is prevalent amongst thoracic surgeons. This has largely resulted from a shortage of experienced surgical mentors and less from any continued scepticism of VATS lobectomy as a legitimate surgical technique that respects oncological principles. Dr Demmy's video atlas is a welcome addition to the limited resources in this field and should serve to stimulate a greater uptake of thoracoscopic lung resections.

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