Video-assisted thoracoscopic thymectomy using 5-mm ports and LigaSure

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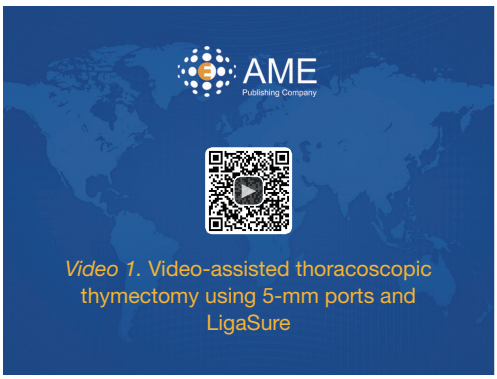
Clinical vignette

A young lady was referred with severe ocular myasthenia gravis. Despite optimal medical care, she had severe diplopia impairing her ability to study. Computed tomography (CT) showed a hyperplastic thymus with no evidence of thymoma.

Surgical technique

The patient was placed under general anesthesia and put into the supine position with the right arm in a hanger above her head. A right-sided video-assisted thoracoscopic (VATS) thymectomy was performed using three 5-mm ports with incisions lateral to the breast after installation of marcain at the port sites. Insufflation of CO_2 was installed at a pressure of up to 10 mmHg. A 5-mm high-definition camera (Olympus) was inserted with 30-degree angulation. For dissection and sealing of the vessels, a LigaSure 5-mm Blunt Tip 37-cm instrument (Covidien) was used.

Dissection was performed along the right phrenic nerve and continued to the right upper horn, visualizing the innominate vein (*Video 1*). The right horn, superior portion of the thymus and left horn were resected with visualization of the jugular and the internal thoracic veins. Dissection was continued along the left phrenic nerve to the lower horns. After expanding this incision to 15 mm, the thymus was resected en bloc and removed from the thoracic cavity in an endo-bag through the lower port. The thymus was marked according to the recommendations from the International Thymic Malignancy Interest Group (ITMIG) and sent for histological analysis (1). A CH 18 chest drain was inserted in the lower port with an intercostal catheter installed and connected to continuous marcain (2).



Video 1 Video-assisted thoracoscopic thymectomy using 5-mm ports and LigaSure.
Available online: http://www.annalscts.com/article/view/7205/9666

Comments

The postoperative course was uneventful and the patient was discharged on postoperative day two. At follow up three months after thymectomy, the patient was in complete remission and without any medication or diplopia. Histopathology revealed hyperplastic thymic tissue.

Caveats

This approach is less invasive with the use of only 5-mm ports. The use of LigaSure reduces bleeding and enhances overview. The technique can also be applied on the left side, but the right side is preferred due to increased space

availability and easier localization of the innominate vein.

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None.

Footnote

Conflicts of Interest: The author has no conflicts of interest to declare.

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