Thymectomy

To the Editor:

I read with interest the article by Yim and colleagues on video-assisted thoracoscopic (VAT) thymectomy in a recent issue of CHEST (1995; 108:1440-43). The technique for this type of thymectomy is fascinating as with other video-assisted thoracoscopic surgery (VATS) procedures, but the ability to perform the operation in this manner does not necessarily indicate that it is indeed advocated.

To be accepted as a preferred, or at least an equal choice, VAT thymectomy should be proven safe, should be of comparable long-term outcome, and should be associated with shorter hospitalization, less pain, a better cosmetic result, and decreased expenses.

The series presented by Yim and associates is very small, but nevertheless does prove that complete thymectomy is feasible and safe by VATS. The question of a cosmetic result was not addressed by the authors, although I would be willing to accept that it is superior to that of the transsternal approach. The operating time was relatively long, especially if, as I assume, anesthetic time (longer for thoracoscopy) was not included. The simple single-lumen endotracheal intubation used for open thymectomy has to be transformed to a complex selective bronchial intubation and lung collapse.

Length of stay after thymectomy is mainly related to pain, duration of drainage, and complications. Respiratory problems caused by the myasthenia itself and requiring prolonged ventilation, are currently uncommon. Therefore, the expected stay after VAT thymectomy should not be significantly different than that of open thymectomy. The cost associated with each procedure would be mainly related to the length of stay, as neither approach requires expensive disposable instrumentation.

The long-term outcome after VAT thymectomy is not known. If complete thymectomy is indeed achieved, then the outcome should be comparable. I am somewhat concerned about patients with thymoma, in whom the delicate capsule may rupture and the tumor may spread to the pleural cavity.

The authors claim that the narcotic requirement was lower after VAT thymectomy. Although this may indeed be the case, the conclusions from such a retrospective study are invalid.

I reviewed our experiences at Sheba Medical Center in Israel with thymic surgery from March 1, 1992, to February 29, 1996. During these 4 years, 29 patients underwent thymic operations. There were 29 patients, including 12 males and 17 females, 17 to 72 years old. Eleven patients had myasthenia only, 5 had myasthenia and a thymoma, and 13 had thymomas or suspected thymic tumors (Table 1). There was an age difference between the groups, with the oldest patients having myasthenia and thymoma. All operations for myasthenia only and most of the operations for myasthenia combined with thymoma were performed through an upper median sternotomy, whereas most operations for thymic tumors required a complete median sternotomy. There was no perioperative mortality, and only two complications. The average postoperative hospital stay was 4.9 days, and it was almost identical for the three groups. It’s not clear why the hospital stay for the transsternal approach in the study by Yim et al was so long.

Our most recent patient is a 37-year-old woman. Myasthenia was diagnosed in July 1995, and the patient had ptosis, blurred vision, diplopia, and muscle weakness. She was treated with pyridostigmine bromide (Mestinon; Hoffmann-LaRoche; Nutley, NJ) 60 mg tid, and was referred for thymectomy.

Plasmapheresis was performed several times, most recently 1 day prior to surgery. The operation was conducted with a single-lumen endotracheal tube, two peripheral IV lines, and the usual monitoring for thoracic surgery. The approach was through a 6-cm midline incision with upper sternal split. The operation took 60 min including anesthesia. A complete thymectomy was done and the sternum was closed without a chest tube. The patient was extubated at the end of the operation and was transferred to her room after 2 hr. She required three doses of parenteral narcotics (meperidine hydrochloride [Demerol; Sterling Winthrop, New York] 50 mg IM) and was then switched to oral medications. She was discharged on the third postoperative day.

Thymectomy certainly can be achieved by different approaches, and VATS may seem very appealing. From our experience, I conclude that the only apparent gain from VAT thymectomy is a better cosmetic result. This is negated by a complex anesthesia, longer operating time, and the potential risk of pleural spread. In my opinion, VAT thymectomy rarely has a role in thoracic surgery.

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To the Editor:

We appreciate the comments from Dr. Yellin on our article (CHEST 1995; 108:1440-43). The main objective of our article is to report on the technical feasibility of video-assisted thoracoscopic surgery.