



## Thoracoscopic Thymectomy

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Dear Editor,

I have read the article by Dr. Mohammad Reza Lashkarizadeh et al. regarding Video-assisted thoracoscopic thymectomy for patients with myasthenia gravis (MG). There are various treatments for myasthenia gravis including Anticholinesterase medications, Immunosuppression, Plasmapheresis, Intravenous Immunoglobulin and Thymectomy. I agree with the authors who found that Video-assisted approach has several advantages but there are some concerns about the results and final recommendation. Need to mention that two separate issues should be distinguished: (1) Surgical removal of thymoma (2) Thymectomy as a treatment for MG. In the absence of a tumor, up to 85% of patients experience improvement after thymectomy but in this study, thymoma patients had significantly more remission (more than three times the patients with normal thymus) and about one fourth of normal thymus cases had no change which is somewhat contradictory (1). The improvement following thymectomy is typically delayed for months to years. In this study, there is no need to mention the duration of time interval between operation and remission. Thymectomy should be carried out in all patients with generalized MG who young and middle aged (at least 55 years). The oldest patient in this series is apparently seventy seven -years

old, but the number of elderly patients and indication of their thymectomy is not included. Whether thymectomy should be recommended in children, in adults older than 55 years old and in patients with weakness limited to the ocular muscles is still a matter of debate. Patients with MuSK antibody-positive MG may not respond to thymectomy and the best response to the operative therapy is achieved in patients with positive acetylcholine receptor antibody (2).

It would be a sound and valid practice to report the number of patients with positive acetylcholine receptor antibody. Thymectomy procedures vary widely regarding their completeness and morbidities. Although standard thymectomy via sternotomy has the advantages of excellent exposure, protection of phrenic nerves and complete thymectomy, there are many disadvantages including a long painful incision, uncosmetic scar, difficult future cardiac surgery and possible sternal instability or lack of unity (3). TransCervical thymectomy is also familiar for surgeons but leads to incomplete thymectomy and is not widely used. On the other hand, Video-Assisted Thymectomy has its peculiar disadvantages: it requires significant endoscopic experience and lacks established comparability to standard approaches. Nevertheless, both trans-sternal and minimally invasive thymectomy

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contributes to an improvement in myasthenia gravis symptoms for all subgroups of patients. There are some problems for data collection regarding the thymectomy in MG in all published series which can be summarized as follows:

- 1- Lack of uniformity for reporting the results
  - 2- Retrospective nature of all studies
  - 3- Variability of MG
  - 4- Lack of objective pre and post-operative assessment
  - 5- Differentiating the accompanying therapy
  - 6- Conflicting classification
  - 7- Having no uniform definition of remission and improvement
  - 8- Having no control group
  - 9- Differentiating the medication after thymectomy
  - 10- Failing to define the length of illness preoperatively
  - 11- Failing to consider the rate of spontaneous remission
  - 12- Including patients with thymoma
  - 13- Failing to include quality of life analysis
- It is hoped that in future, some form of targeted non-

surgical therapy with no significant side effects produce long-term remissions in these patients.

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