

# THORACOSCOPIC THYMECTOMY IN PATIENTS WITH MYASTHENIA GRAVIS

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## INTRODUCTION

Juvenile myasthenia gravis (JMG) is an autoimmune neuromuscular disorder characterized by muscle weakness, fatigue, and pathological exhaustion of voluntary muscles. Studies investigating the effects of thymectomy in JMG patients have demonstrated general efficacy, though outcomes vary in terms of complete remission, improvement, and failure rates. The indications for thymectomy and the choice of surgical approach remain partially controversial

## AIM OF THE STUDY

The aim of this study is to present our 32-years experience in the surgical treatment of JMG, specially taking into consideration the age at the time of thymectomy and the time elapsed from onset of symptoms until thymectomy, and their effect on the outcome.

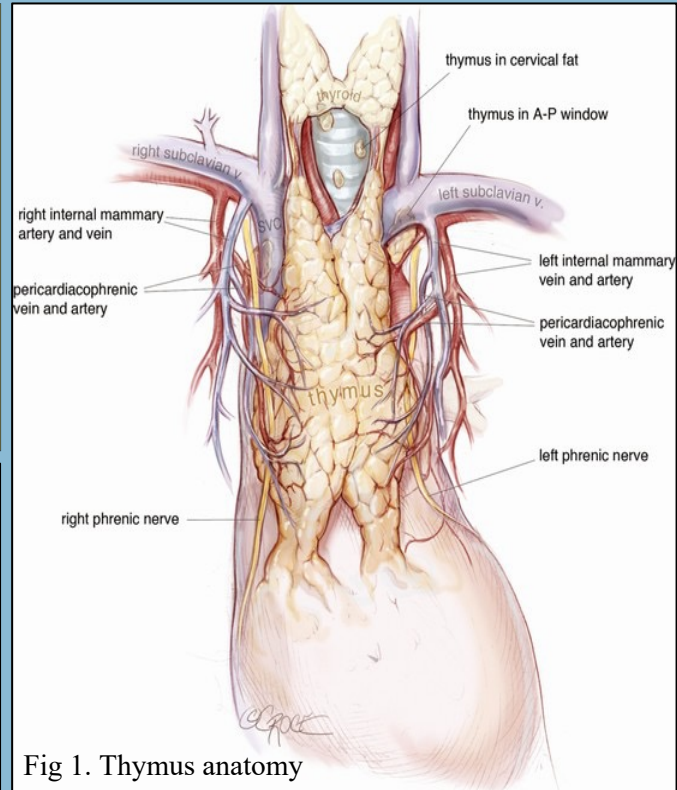


Fig 1. Thymus anatomy

## PATIENTS AND METHODS

From 1992 to 2023, 64 patients with JMG, aged 4 to 18 years, underwent transsternal thymectomy, and thoracoscopy thymectomies were done in 26 patients in the past 17 years. The postoperative follow-up period ranged from 2 months to 16 years. Notably, 48 patients (75%) had complete remission of symptoms or minimal deficit over the first two years after thymectomy.

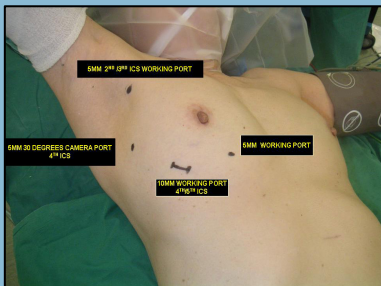


Fig. 2 Positioning of the patient



Fig. 3 Opening of the pleura



Fig. 4 Ultrasound vein ligation



Fig. 5 Dissection of the gland



Fig. 6 Gland ready to be removed



Fig. 7 Removed thymus

## CONCLUSION

Our experience confirmed that radical thymectomy was effective and beneficial for most patients and minimal invasive surgery in these patients has huge advantage as minimal blood loss, shorter duration of operation and postoperative recovery. The best results were achieved in patients who underwent early thymectomy with a maximally shortened period of preoperative preparation of the patient.