

Myasthenia Gravis Patients, Do They Need An ICU Bed Post Thymectomy

A. Ahmad, M. Hawari, A. Reza
Nottingham university Hospital

Introduction

- Myasthenia Gravis (MG) can be a paraneoplastic manifestation of Thymoma and surgical management is indicated to improve outcomes[1].
- 21% of patients with MG have thymomas [2]. Thymectomy is also indicated in non-diseased thymus to reduce long term pharmacotherapy exposure and improving outcomes.
- As routine practice in our trust, thymectomy patients are cared on Intensive care unit (ICU) for routine post-operative care instead of ward/ high dependency unit.
- There is a risk of respiratory failure requiring re-intubation[3]. This has the implications including: cost, use of resources and cancellations due to lack of ITU beds

Objectives

- In this study we aim to evaluate if post-operative ITU care is required or can the patient’s be managed on the ward to prevent implications mentioned above.

Methods

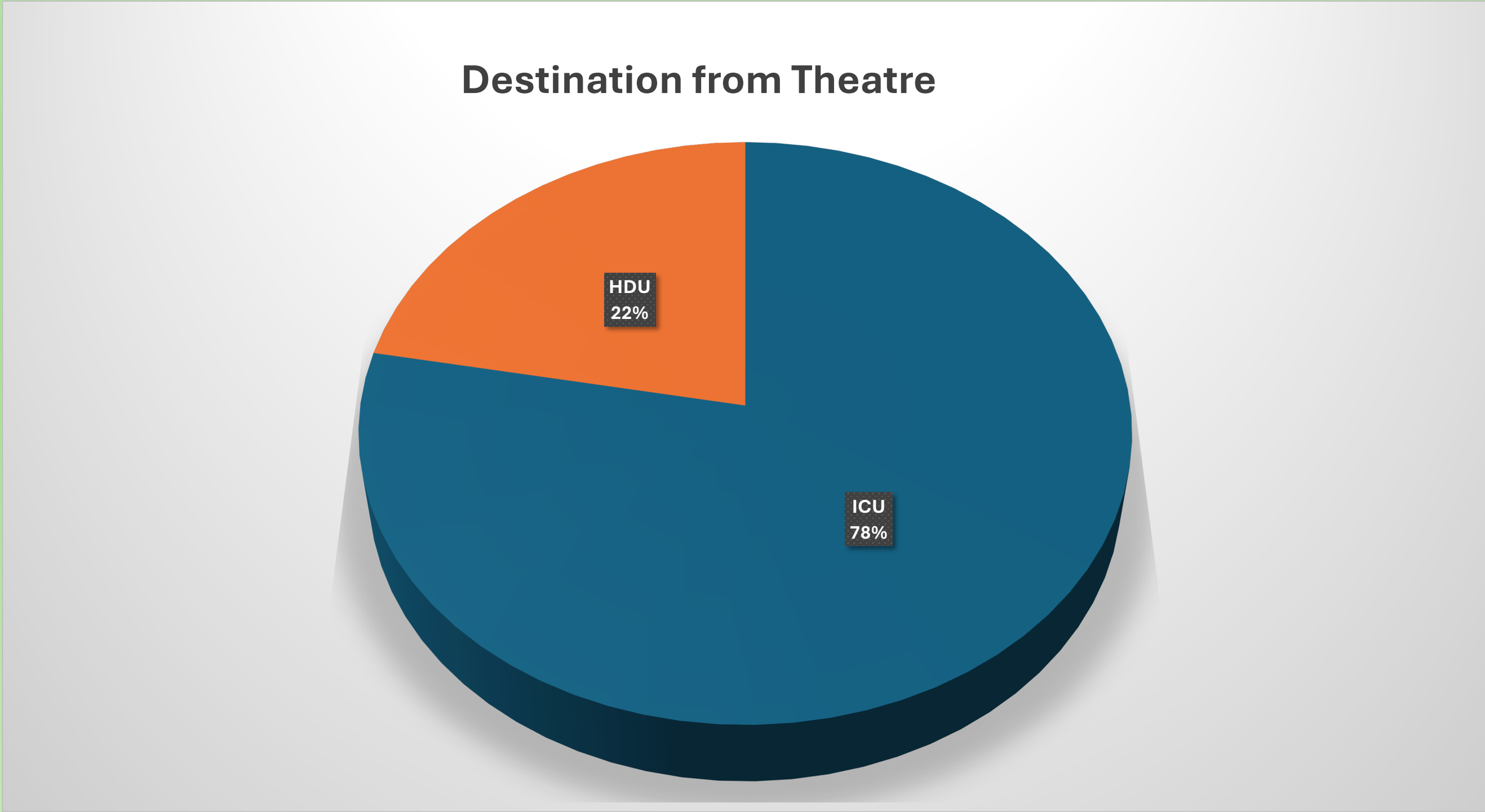
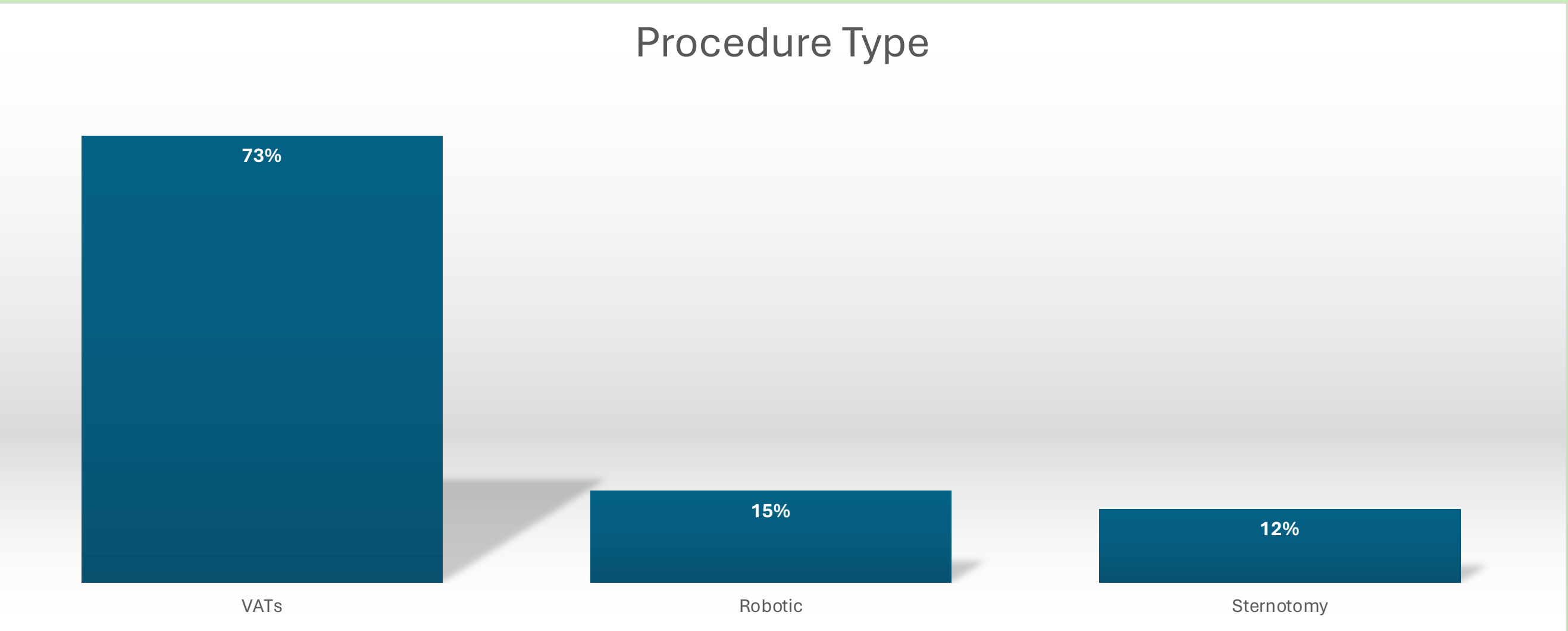
- Retrospective data analysis performed of MG patients undergoing thymectomy between 2009 and 2022. Parameters include:

- Patient’s demographics
- Length of stay (LOS) and management required in ICU
- Post- operative complications
- Procedure
- Total LOS
- Histology

Results

Total patients: Total Patients- 59 (Female: 78%(n=46) and Male: 22% (n=13))
Median Age- 48 years

Comorbidity	Percentage (n)
Diabetes	11.9% (n=7)
IHD	1.7% (n=1)
HTN	15.3% (n=9)
On steroid therapy at time of surgery	20.3% (n=12)
COPD	0%
Asthma	7.7% (n=4)
Smoking (Current/ Ex/ never)	15.3%/32.3%/ 52.4% (n=9/19/31)



Post-operative Complications

- Post-op complications were recorded in only 10% (n=6) patients, which included:

- Bleeding – requiring theatre, Phrenic nerve injury – diaphragm paralysis, Postoperative desaturation - requiring NIV in ITU , Arterial line abscess requiring prolonged hospital stay, Wound infection , Slow AF

- No patients required invasive ventilation post-op

- Average LOS in ITU was 1.05 days (± 0.08)

- 97% of the patients were stepped down to ward after one day in ICU

- Median length of stay (LOS) for post-op ICU recovery was 3.5 days compared 4 days for ward patients.

- Median LOS for VATS was 3 days, Robotic patients was 4 days and sternotomy was 7 days

Discussion

- Our results show most MG patient’s, post elective thymectomy can be managed on the ward/HDU
- Only 2 patient required ICU stay for more then 1 day
- LOS was longest with sternotomy patients when compared to VATS or robotic approach

Conclusions

In this study, post-thymectomy patients with MG did not require significant ICU intervention during routine post-operative stay.

In selected number of patients, surgery can be performed without the need for routine post-op ICU admission. This will help to prevent cancellations due to ICU scarcity, providing cost effective and efficient service.

References

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[3] Aydin Y, Ulas AB, Mutlu V, Colak A, Eroglu A. Thymectomy in Myasthenia Gravis. Eurasian J Med. 2017 Feb;49(1):48-52. doi: 10.5152/eurasianjmed.2017.17009. PMID: 28416933; PMCID: PMC5389494.
- [4] Raza A, Woo E. Video-assisted thoracoscopic surgery versus sternotomy in thymectomy for thymoma and myasthenia gravis. Ann Cardiothorac Surg. 2016 Jan;5(1):33-7. doi: 10.3978/j.issn.2225-319X.2015.10.01. PMID: 26904429; PMCID: PMC4740098.