



EVALUATION THE RESULT OF VIDEO – ASSISTED THORACOSCOPIC SURGERY FOR TREATMENT THYMOMA WITH MYASTHENIA GRAVIS AT MILITARY HOSPITAL 103

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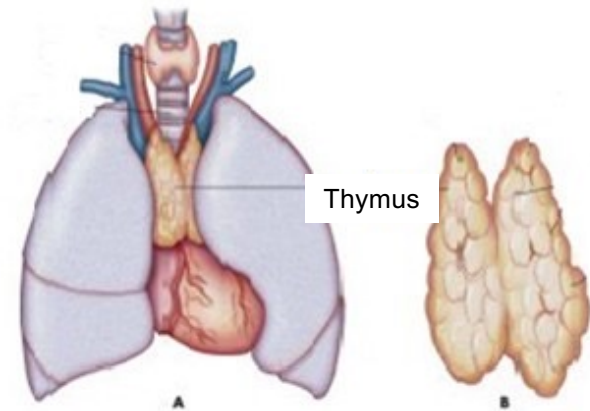
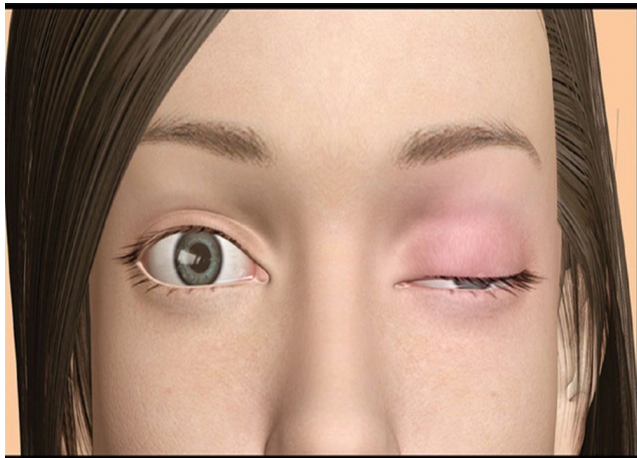
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OVERVIEW

❖ Myasthenia Gravis (MG) is an autoimmune neuromuscular disorder characterized by skeletal muscle weakness.

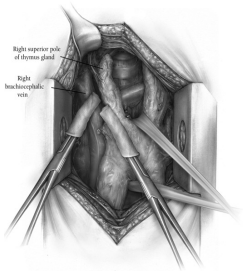
❖ Thymoma is the most common type of tumor in the anterior mediastinum.



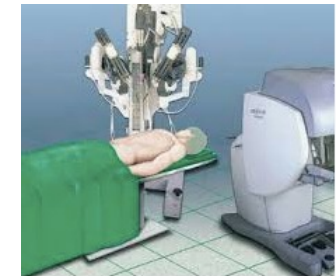
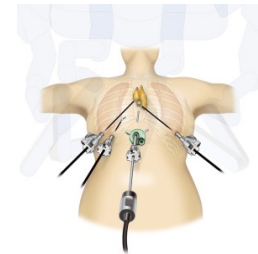
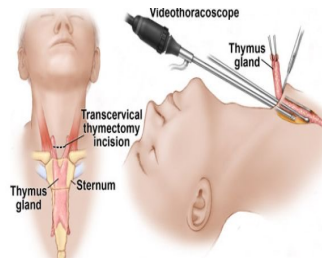
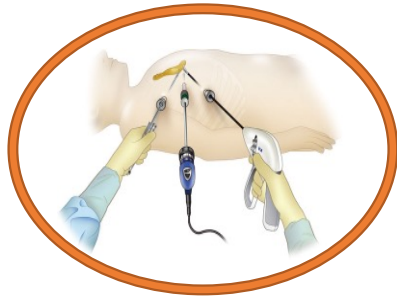
OVERVIEW

Surgical methods

Open surgery



Endoscopic surgery



OVERVIEW

» OBJECTIVES

To investigate some clinical and paraclinical characteristics of patients who had thymoma with MG undergoing thymectomy by VATS at military hospital 103.

Objective 1



Objective 2

To evaluate the result of VATS for treatment thymoma with MG at military hospital 103.



PATIENTS AND METHODS

❖ **Patients:** 65 patients with thymomatous MG undergoing thymectomy by VATS in the Thoracic Surgery Department, at Military Hospital 103 from 1/2014 -12/2020.

Inclusion criteria

- Patients were diagnosed preoperatively thymoma with MG.
- Patients were performed thymectomy by VATS .
- Postoperative histopathology was thymoma.
- The patient's medical record had enough criteria for research.

Exclusion criteria

- Patients with recurrent thymoma
- No indication for VATS



PATIENTS AND METHODS

The research 's tools



Ultrasonic knife



Liga-sure knife



Staplers



Endoscopic tools



PATIENTS AND METHODS

Indications

- ❖ MG group I, IIA
- ❖ Diameter of thymoma was less than 10 cm, no invasion to vessels, trachea, hilum...

Preoperative preparations

- ❖ CT scans or/and MRI.
- ❖ Stable MG.
- Cholinesterase inhibitors, Corticosteroids, immunosuppressants
- Intravenous therapy (plasmapheresis and intravenous immunoglobulin)
- ❖ Control to infective factors..



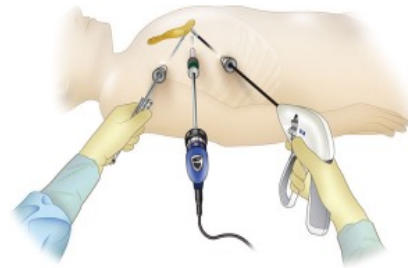
PATIENTS AND METHODS

Video-assisted thoracoscopic surgery

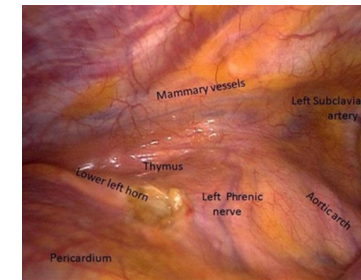
Patient's position



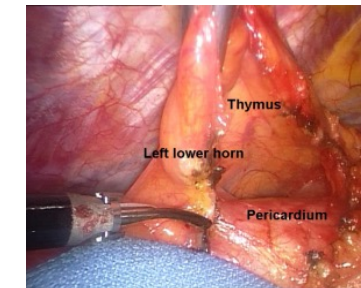
Incisions for inserting trocars



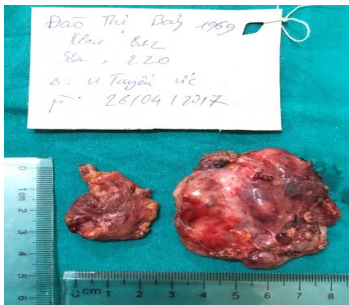
Access pleural space



Dissection of thymus gland and fat tissue



Removal of specimen and chest tube



PATIENTS AND METHODS

Research criteria

Clinical and paraclinical criteria

- Onset age
- Gender
- MG status
- Thymoma images on the CT-scan and MRI
- Histopathology
- Masaoka 's stage

Characteristics and the results of operation.

- Surgical method
- Intraoperative complications
- Surgical time and blood loss
- Intraoperative and postoperative complications
- Postoperative hospital stay time
- Postoperative outcome.

RESULTS AND DISCUSSION

Clinical characteristics

Features	n	%
Onset age		
≤ 50	42	64.6
> 50	23	35.4
Mean age	46.93 ± 9.93 (21 – 70)	
Gender		
Male	32	49.2
Female	33	50.8
MG status		
I	14	21.5
IIA	46	70.8
IIB	4	6.2
III	1	1.5

- ❖ Mean age:
 - Xuan Xie: 33.9 ± 11.5
 - Menon M.D: 48.1 ± 2.1
 - Claire M.J: 48.8 ± 0.7.
- ❖ The ratio of female/male:
 - Claire: 1.37; Nguyen Hong Hien: 1.89.

RESULTS AND DISCUSSION

Paraclinical characteristics

The features of thymoma on CT and MRI		n	%
Location	The middle	29	44.6
	The right	19	29.2
	The left	17	26.2
Shape	Circle	37	56.9
	Oval	28	43.1
Contour	Smooth	52	80
	Lobulated	13	20
Degree of contrast enhancement	Low	9	13.8
	Middle	15	23.1
	High	41	63.1
Mean size (mm)	36.98 x 29.89		
Mean CSR	1.05 ± 0.19		

Feature	n	%
Histopathology		
A	13	20
AB	19	29.3
B1	14	21.5
B2	18	27.7
B3	1	1.5
Masaoka 's stage		
I	35	53.8
II	9	13.8
III	15	23.1
IVa	6	9.2

RESULTS AND DISCUSSION

Surgical characteristics

Features	n	%
Surgical methods		
VATS	54	83.1
Conversion to open surgery	11	16.9
Intraoperative complications		
Aorta injury	1	1.54
Innominate vein injury	1	1.54
No complication	63	96.92
Surgical time (min)		
≤ 60	23	35.4
> 60 - 120	30	46.2
> 120	12	18.5
Mean surgical time	97.76 ± 49.12	
Mean blood loss	40.46 ± 33.97	

Features	n	%
Postoperative complications		
Respiratory failure	5	7.7
Pleural effusion	1	1.55
Pneumothorax	1	1.55
No complication	58	89.2
Postoperative hospital stay (days)		
≤ 7	30	46.2
8 - 10	23	35.4
≥ 10	12	18.5
Mean postoperative hospital stay	9.66 ± 5.6	



RESULTS AND DISCUSSION

Postoperative outcome

Postoperative MG status	The follow up time					
	1 month (n=65)		6 months (n=58)		Over 1 year (n=51)	
	n	%	n	%	n	%
Remission	8	12.3	9	15.5	12	23.5
Improved	45	69.2	42	72.4	34	66.7
Unchanged	12	18.5	7	12.1	5	9.8
Worsen	0	0	0	0	0	0



CONCLUSION

1. The clinical and paraclinical characteristics of patients with MG undergoing VATS thymectomy.

- Mean age was 46.93 ± 9.93 ; The Female/male was 1.03.
- The majority of patients (92.3%) was grade I and IIA
- The features of thymoma on CT and MRI: circle shape was 56.9%; mean size: 36.98×29.89 ; the majority (80%) had smooth contour; the degree of contrast enhancement was middle and high, mean CSR was 1.05 ± 0.19 .
- Histopathology: including all of types, the percentage of AB and B2 were highest, 29.3% and 27.7% respectively. There was only one patient with B3 and there no case with thymic cancer.
- Masaoka 's stage: Masaoka I, II was 67.6%, Masaoka III was 23.1and Masaoka IVa was 9.2.



CONCLUSION

2. The outcomes of VATS for treatment thymoma with MG at Military Hospital 103

- The proportion of VATS was 83.1%.
- Mean surgical time was 97.76 ± 49.12 min.
- Mean blood loss: 40.46 ± 33.97 ml.
- The rates of Intraoperative and postoperative complication were 3.08% và 10.7%. There was no the death during intraoperative operation and hospital stay.
- Mean postoperative hospital stay was 9.66 ± 5.6 days. The percentage of under 10 days was 81.6%.
- The long term outcomes: the rate of remission and improved increased gradually to follow up time: the figure for 1 months was 81.5%, 6 months was 87.9%, and the figure for over 1 year was 90.2%.





THANK FOR YOUR ATTENTION

