





Hospital Universitari MútuaTerrassa BARCELONA



# UNIPORTAL ROBOTIC-ASSISTED EXTENDED THYMECTOMY

## Melek, Agkoc; Tolunay, Turan; Filiz, Sabahat; Akif, Turna

Istanbul University-Cerrahpasa, Cerrahpasa Medical Faculty, Department of Thoracic Surgery, Istanbul, Turkey; Istanbul University-Cerrahpasa, Cerrahpasa Medical Faculty, Istanbul, Turkey

### Introduction

Robotic-assisted thoracic surgery (RATS) offers superior three-dimensional visualization and maneuverability compared to traditional video-assisted thoracoscopic surgery (VATS). However, it involves using multiple ports. In the era of uniportal VATS which is associated with less pain and quicker recovery, uniportal RATS techniques continue to improve. Indication of The Technique A 66-year-old male who had the diagnosis of myasthenia gravis, was admitted to thoracic surgery clinic with an 80 mm diameter lobulated, calcified mass located in the anterior mediastinum. An extended thymectomy via right uniportal RATS was scheduled.

## Description of The Technique

In the right semi-lateral decubitus position, a 5-cm incision was made in the 6th intercostal space along the anterior axillary line. After placement of wound retractor, the robotic arms were inserted with the camera arm positioned at the top. The robotic arms were defined as follows: 1st arm for left hand, using prograsper forceps; 2nd arm for camera; and 3rd arm for right hand, using Maryland bipolar forceps. Forth arm was cancelled. Dissection began from the inferior part of the mass and was carried out onto the pericardium and the borders of the bilateral phrenic nerves. Thymic veins were detected, encircled and ligated via bipolar energy device. Thyrothymic ligaments were pulled and divided. The extended thymectomy was completed Paratracheal lymph nodes were biopsied. Pathological examination confirmed a type B2+B3 thymoma with extracapsular invasion.

#### Conclusion

Extended thymectomy for anterior mediastinal masses via uniportal RATS is safe and feasible. However, its impact on postoperative and oncological outcomes warrants further studies.