AB046. PS02.10: ROBOTIC thymectomy for early stage thymoma: single center experience

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Background: Robotic-assisted thymectomy seems to be a promising alternative to sternotomy in the treatment of early stage thymomas. Anyway, minimally invasive thymectomy is still controversial because of the supposed increased risk of local recurrence and the lack of long-term oncological follow-up. We reviewed our experience reporting surgical and oncological results after robotic thymectomy in early-stage thymoma.

Methods: Between 2002 and 2016, 56 patients (25 men and 31 women; median age, 57 years) with early-stage thymoma (Masaoka I and II) were operated by left-sided (89.3%) or right-sided (10.7%) robotic approach. Thirty patients (53.6%) had associated myasthenia gravis. Duration of surgery, post-operative complications, postoperative hospital stay and oncological results were evaluated.

Results: Average operative time was 144.6 minutes (range, 60–290 minutes). Two (3.5%) patients needed open conversion, in one case because of the dimension of the lesion leading to unsafe dissection/manipulation, in the other in the suspicion of pericardial infiltration. In one case (1.7%) a cervicotomy was performed to complete thymectomy. No vascular and nervous injuries were recorded, and no perioperative mortality occurred. Two patients (3.5%) had postoperative complications (1 myasthenic crisis and 1 hemothorax). Median hospital stay was 3 days (range, 2–10 days). Median diameter of resected tumors was 4.5 cm (range, 1–9 cm), and Masaoka stage was stage I in 11 patients (19.6%) and stage II in 45 patients (80.4%). After a median follow up of 30 months (range, 5–180 months) one patient died for non-thymoma related cause and one (1.7%) experienced a single pleural recurrence 32 months after initial surgery.

Conclusions: Robotic thymectomy for early-stage thymoma is a technically feasible procedure with low complication rate and a short hospital stay. Oncological outcome seems promising, but longer follow-up is needed to validate this as a standard approach.

Keywords: Thymoma; robotic thymectomy; early stage

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