

AB002. Robotic thymectomy for thymomas: a retrospective follow-up study in The Netherlands

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Background: The Maastricht University Medical Center+ (MUMC+) is a Dutch center of expertise for the treatment of thymomas. The aim of this study was to investigate the long-term oncological-, surgical-, and neurological outcomes of all patients who underwent a robotic thymectomy for a thymoma in the MUMC+.

Methods: We retrospectively analyzed the clinic-pathological data of all consecutive patients with a thymoma who underwent robotic thymectomy, using the DaVinci Robotic System at the MUMC+ between April 2004 and December 2018. Follow-up data was collected from 60 referring Dutch hospitals with the written consent of the patients.

Results: In total, 398 robotic thymectomies were performed and 130 thymomas (32.7%) were found. Mean

age was 58.9±13.4 years and non-myasthenic patients were significantly older than patients with MG. Median follow-up time, procedure time and hospitalization were 46 months, 116 minutes and 3 days respectively. In 8.4% of the patients a conversion was performed and in 20.8% a complication was registered. Resections of pericardium, lung and phrenic nerve were performed in 24 patients (18.5%) and advanced-stage thymomas had significant more extended resections. The majority of myasthenic patients with a thymoma went into remission, mostly within 12 to 24 months after thymectomy. No statistical difference was found in the amount of complications, conversions, incomplete resections or death between patients with myasthenia gravis versus non-myasthenic patients. Patients who used immunosuppressive drugs during the first 12 months after thymectomy experienced significantly more often remission of MG. In 36 patients (27.7%) postoperative radiotherapy was performed. The recurrence rate was 9.1% and recurrences were predominantly diagnosed in patients with MG and in B2-thymomas. The five-year thymoma-related survival rate was 97.7%.

Conclusions: Robotic thymectomy was found safe and feasible in patients with thymomatous myasthenia gravis, early-stage thymomas and most advanced-stage thymomas. A national guideline could contribute to the improvement of the oncological follow-up of thymic epithelial tumors in The Netherlands.

Keywords: Thymomas; robotic-thymectomy; follow-up

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Footnote

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