## AB051. PS02.15: Results of extended thymectomy in thymomatous myasthenia gravis

Bülent M. Yenigün<sup>1</sup>, Yusuf Kahya<sup>1</sup>, Bilge Ayça Karabörk Kırmızı<sup>2</sup>, Cabir Yüksel<sup>1</sup>, Serkan Enön<sup>1</sup>, Serpil Dizbay Sak<sup>2</sup>, Ayten Kayı Cangır<sup>1</sup>

<sup>1</sup>Department of Thoracic Surgery, <sup>2</sup>Department of Pathology, Ankara School of Medicine, Ankara, Turkey

**Background:** Extended thymectomy is known to have a great effect on the remission in the early stages of the myasthenia gravis (MG). In this study, it was aimed to evaluate myasthenic remission status in patients who underwent extended thymectomy with thymomatous MG (TMG).

Methods: Between 2005 and 2015, 15 patients who underwent extended thymectomy for TMG were included in the study at Ankara University School of Medicine Thoracic Surgery Department. MG cases were diagnosed by neurology clinic using neurological examination, acetylcholine receptor autoantibody test and single fiber electromyography. Preoperative plasmapheresis was performed, on the suggestion of neurology clinic, for patients whom a mediastinal mass consistent with the thymoma was detected in PET-CT and thorax CT/MRI examinations and were planned to have an operation. After plasmapheresis, extended thymectomy was performed on all patients with transsternal approach. Modified Osserman classification was used to determine the preoperative clinical grade of MG. Thymoma histology was determined with WHO classification and thymoma staging was determined with Masaoka-Koga classification. Long-term follow-ups of the patients were made at third month, first year and second years by evaluating clinical conditions together with neurology clinics. Clinical conditions of patients in follow-ups were classified as: (I) complete remission (no medication, clinically better); (II) partial remission (drug use, clinically better); (III)

51

no change; and (IV) increase in clinical symptoms (worsening). Results: Nine of the patients were female and 6 of the patients were male. The mean age was 38.6 (range, 25-69) years. Two patients were histologically type A, 2 patients were histologically type AB, 2 patients were histologically type B1, 5 patients were histologically type B2, 4 patients were histologically type B3. Four patients were stage 1, 8 patients were stage 2, 2 patients were stage 3, and 1 patient was stage 4a. Pathologic examination revealed R1 resection in 5 patients and R0 resection in 10 patients. 1 patient underwent surgery after neoadjuvant chemoradiotherapy. One patient received adjuvant chemotherapy, 5 patients received adjuvant radiotherapy, 2 patients received adjuvant chemoradiotherapy and 7 patients didn't receive adjuvant therapy. The 5-year mean survival time was 56 months (range, 27-132 months). All patients were alive during followup. According to the modified Osserman classification, 8 patients were stage 1, 5 patients were stage 2a, and 2 patients were stage 2b. After surgery, no complete remission of MG occurred in any patient, but partial remission was detected in 3 patients. No changes were observed in 12 patients.

**Conclusions:** Thymomas occur in about 10% of MG patients, whereas MG occurs in about 33% of patients with thymoma. The myasthenic remission rate, clinical course and prognosis of TMG after thymectomy are worse than that of non-thymomatous MG. In this study, no complete remission was observed in any patient, only partial remission was found in 20% of the patients. Although the relationship between MG and thymomas is well documented, the characteristics of paraneoplastic MG associated with invasive thymoma are not well known today. There is a need for a larger prospective randomized study in this regard.

Keywords: Extended thymectomy; thymoma; myasthenia gravis (MG)

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