AB043. PS02.07: Features of thymoma-associated myasthenia gravis: a retrospective analysis on 346 patients

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Background: TAMG (thymoma-associated MG) represents one of the subtypes of MG associated with autoantibodies against the acetylcholine receptor (AChR-Ab). We analyzed the clinical and serological features of patients with thymoma and relapsed thymoma, at different time points, in order to identify a possible relationship among relapses, clinical features and changes in AChR-Ab titres.

Methods: We enrolled 346 MG patients with AChR-Ab and thymoma: 318 with TAMG and 28 (8.8%) who experienced one or more recurrences of thymoma. We then retrospectively assessed: age of MG onset, MG clinical status according to MGFA (Myasthenia Gravis Foundation of America), time of thymectomy, surgical approach, post-thymectomy status and oncological features (according to histological classifications: WHO and Masaoka-Koga). AChR-Ab serum titres have been closely monitored overtime. GraphPad Prism 7.03 was used to perform Statistical analysis and P values <0.05 were considered statistically significant.

Results: Patients with relapsed thymoma were younger than those without recurrences (P<0.0001) with an average neoplastic disease-free time of about 3.7 years. In relapsed thymomas symptoms worsened immediately after the first thymectomy (P<0.0001). However, MG symptoms did not worsen by the time of recurrence of thymoma. Relapsed thymomas had a Masaoka stage more aggressive than those without recurrences (P<0.0001). Patients with relapses achieved a better MG status than those with thymoma (P<0.0115). Overall, AChR-Ab titres in patients with thymoma decreased immediately after thymectomy (thymomas: P<0.0001; relapsed thymomas: P<0.02) and remained unchanged overtime. There was no statistical difference in AChRAb titres before and immediately after thymectomy between patients with relapsed thymoma and patients without relapses.

Conclusions: Thymoma recurrences are not associated with an increase of AChR-Ab titres or worsening of MG symptoms but with the histological grading. Clinical presentations are similar in thymoma and relapsed thymoma, although symptoms can get worse immediately after thymectomy in the second group of patients. In the long-term, pharmacological and complete stable remission is achieved by a high percentage of patients with relapsed thymoma. Although rare, relapsed thymoma does occur and further studies would need to be carried out to identify possible biomarkers of recurrence.

Keywords: Thymoma-associated myasthenia gravis (TAMG); myasthenia gravis; relapsed thymoma; anti-acetylcholine receptor antibodies

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