

AB039. PS02.03: The risk of developing extrathymic malignancies in patients with thymoma after surgery

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Background: Previous reports have shown that patients with thymoma are at high risk of developing second malignancies. The aim of this study is to investigate the impact of second tumors (STs) on prognosis of patients with thymoma and the risk factors of developing STs in patients with thymoma.

Methods: A multicenter retrospective review of patients with thymoma who underwent surgical resection (N=207, 04/1991–03/2016) was conducted. Exclusion criteria: recurrence of thymoma, rare types of thymoma (metaplastic thymoma and micronodular thymoma with lymphoid stroma) or missing data. The overall STs number and incidence were calculated. Potential variables of predictors of STs were also evaluated. Kaplan-Meier methods and Fine-Gray models were used.

Results: One hundred and eighty-eight patients were

included in this analysis. Forty-five STs were observed (15 metachronous, 7 synchronous, 23 detected before surgery). There was no significant difference in overall survival between patients with STs and those without STs (P=0.151), however, among patients with non-advanced thymoma (8th TNM classification Stage I), patients with STs had worse prognosis in overall survival than those without STs (10-year OS; 77.6% vs. 95.4%, P=0.01). The incidence of STs development was significantly higher in patients with thymoma of type AB or B1 than those with type A, B2 or B3 (P=0.02). In multivariate analysis of cumulative incidence of STs, Type AB or B1 (HR 4.077; 95% CI, 0.916–18.14; P=0.065) and male gender (HR 3.259; 95% CI, 0.925–11.48; P=0.066) seems to be associated with STs development.

Conclusions: Extrathymic malignancies were associated with poor survival in patients with non-advanced thymoma after surgery. WHO classification type AB or B1 and male gender may be risk factors of developing STs after surgery.

Keywords: Thymoma; prognostic factor; extrathymic malignancies

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