

AB024. Autoimmune and neoplastic comorbidities in patients from the National Danish TET Database

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Background: This study investigates the autoimmune and neoplastic comorbidities of 251 patients from the Danish National Thymic Tumour Database diagnosed between 2015 and 2021 with the aim of identifying possible associations between thymic epithelial tumors (TETs) and an increased risk of developing certain comorbidities.

Methods: The study examines data collected from online records. Only comorbidities diagnosed before or simultaneously with the thymic malignancy are included. The autoimmune comorbidities include diseases with well documented autoimmune pathogenesis and conditions with a suspected autoimmune cause in the patient. The neoplastic comorbidities include cancer diagnoses and high-grade neoplasms excluding non-melanoma skin cancer and low-grade neoplasms. All data is analyzed using descriptive statistics.

Results: Autoimmune diseases were present in 89 (35%) of the before or subequal to TET diagnosis. Myasthenia gravis had the highest prevalence of these and was present in 48 (19%) of the patients before diagnosis of their thymic malignancy. Thymoma was the most frequent histological classification among patients already diagnosed with myasthenia gravis and was observed in 46 cases. And, 57% of the thymomas in patients with myasthenia gravis had

a component of type B2. Neoplastic comorbidities were identified in 79 (31%) patients before TET diagnosis. The most frequent of these were colon and breast cancer both observed in 17 (6.8%) cases followed by prostate cancer observed in 7 (2.8%) patients.

Conclusions: The prevalence of autoimmune diseases in the cohort is 35% surpassing the lifetime risk of autoimmunity being 5% in the Danish population. This could indicate an association between autoimmune diseases and development of thymic malignancies. A possible connection between TET development and previous cancer diagnoses could be made, as the prevalence of previous neoplastic comorbidities in the cohort with an average age of 64.2 is similar to the cumulative risk of cancer for Danish 74-year-olds.

Keywords: Myasthenia gravis; comorbidities; extrathymic neoplasms

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Footnote

Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at <https://med.amegroups.com/article/view/10.21037/med-23-ab024/coif>). R.H.P. reports speaker fee from Medtronic, AMBU, AstraZeneca, Medela and participation on the advisory board of AstraZeneca, BMS, Roche, MSD. The other authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013). The study demands no direct involvement of the patients. Therefore, no ethical approval nor informed consent was required.

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