

Preface for Thymic Malignancy: More Hands Produce Stronger Flames!

Thymic epithelial tumors (TET) are neoplasms that arise from the thymic gland usually in the prevascular mediastinum. They are considered malignant neoplasms as they can recur, metastasize and potentially lead to the death of the patient (1,2). However, many patients have a favorable outcome and eventually die of another cause. TET are rare with an incidence of 1.5 cases/million population/year. Because of their paucity and their usually favourable outcome, TET are difficult to study. While many single-institution studies of clinico-pathologic features have been published, these reports usually include a relative small number of cases. In addition, small case series to compare different treatment options are available, however, again, these studies in general lack power and are retrospective in nature. Prospective randomized clinical trials are extremely challenging and have not been performed on a large scale. However, such trials would be important as some TET behave in an aggressive manner and standardized treatment of these tumors is currently lacking.

The paucity of TET and their in general excellent prognosis requires “more hands to produce stronger flames”. Joint global efforts are crucial to acquire a sufficient number of such cases for meaningful studies to advance our knowledge of the disease and its optimal treatment regimens. Within recent years, regional [Chinese Alliance for Research in Thymomas (ChART) (3), Japanese Association for Research of the Thymus (JART) (4), Surveillance, Epidemiology, and End Results (SEER) database (5)] and global [European Society of Thoracic Surgeon (ESTS) (6), International Thymic Malignancy Interest Group (ITMIG) (7)] organizations have been formed to bring physicians of various specialties including medical oncology, neurology, pathology, radiation oncology, radiology, and thoracic surgery, other health care personnel, patients and patient advocates from around the world together to study TET. Large regional and international databases comprised of patients with the disease are an important foundation of these studies. These databases are of retrospective and prospective nature and are used for the study of clinical features, pathologic subtypes and findings, surgical procedures, treatment strategies and outcomes as presented in many of the articles in this book. These databases will also potentially be advantageous to discern ethnic differences in the pathogenesis of the disease. Moreover, only these kind of global efforts and international collaboration will allow for future prospective randomized trials that might explore different treatment options and possibly personalized treatment.

To standardize treatment, global standardization of diagnosis and staging of TET are important. Therefore, major efforts have been undertaken within the last decade to enhance reproducibility of the pathologic subtyping of TETs and to develop a staging system that can be used for all subtypes of TET including thymoma, thymic carcinoma and thymic neuroendocrine tumors. As a result, the most recent WHO classification of TET was published in 2015 and pathologists are encouraged to use that for their diagnosis of TET and their subtypes (1,8) While over the years institutions have used the Masaoka staging (9) or the Masaoka-Koga staging (10) to stage thymomas and/or the TNM staging that was proposed by the WHO in 2004 (11) to stage thymic carcinomas, the International Association of the Study of Lung Cancer (IASLC) together with ITMIG proposed a staging for TET that now can be used for thymomas, thymic carcinomas and thymic neuroendocrine tumors (12) This proposed staging system was incorporated in the 8th AJCC/UICC TNM staging classification and is currently introduced or will be introduced shortly globally for staging of TET.

This book illustrates the remarkable results in the study of TET that have been accomplished through collaborative projects at regional and global level. Many of these projects were only possible thanks to established retrospective and prospective regional and international databases. These concerted efforts built a solid foundation for future projects such as the molecular study of TET and studies towards standardized and personal treatment of patients with these tumors amongst other projects. “More Hands Produce Stronger Flames!”

References

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