Thymoma exhibiting pleural effusion at disease progression. Case report.

Alejandro Brito García^{1,2}Isabel Betancor Fernández^{1,2}Sonia García Hernández. M. Carmen Martín Corriente, ¹ Candelaria García Castro. ¹

1:Servicio de Anatomía Patológica, Complejo Hospitalario Universitario de Canarias. 2: Programa de Doctorado en Ciencias de la Salud, Universidad de La Laguna



33rd European Congress of Pathology

Pathology: Compass for optimal patient therapy 29 - 31 August 2021 | virtual

E-PS-04-005

Authors declare no financial conflicts of interest

Background & objectives

Thymomas are uncommon neoplasms. Relapse after aggressive locorregional treatment is unfrequent. Metastatic pleural dissemination can occur. However, malignant pleural effusion is rare. We present a case report, with emphasis on differential diagnosis and relevance of cell blocks use for immunocytochemistry.

Methods

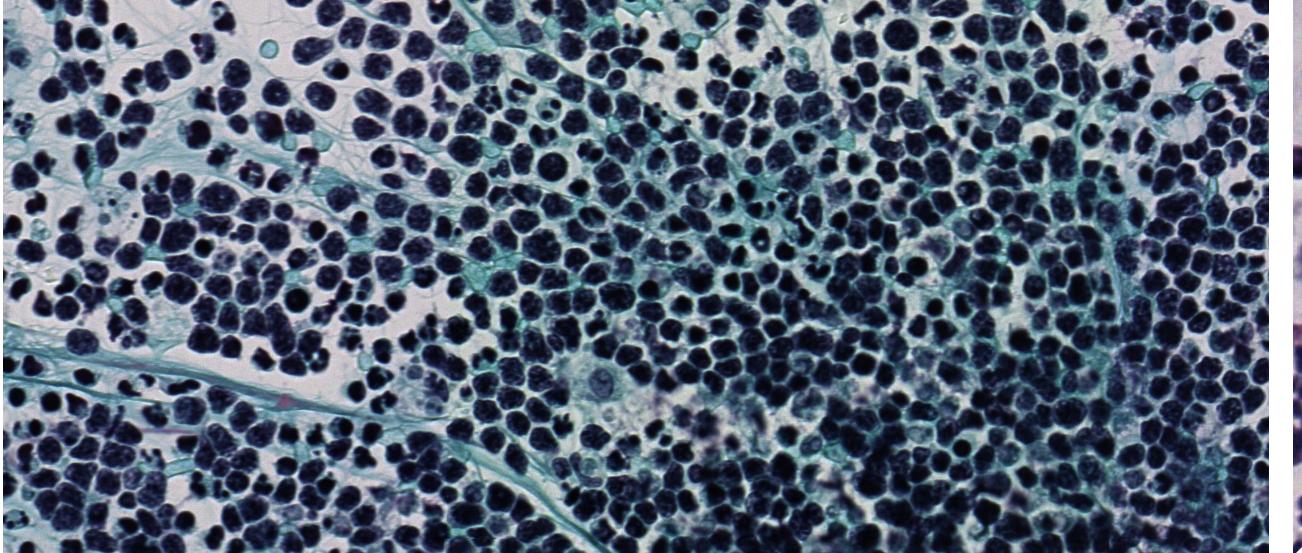
53 year old woman suffering from miastenia gravis was found to have a mediastinal mass. B3 thymoma diagnosis was made. Margins were affected. She underwent locorregional radiotherapy. After 4 years of follow-up, disease relapsed as pleural nodules. She started systemic chemotherapy. Stable disease was archieved. 10 months later, she developed pleural effusion. Cytospins and cell blocks were evaluated.

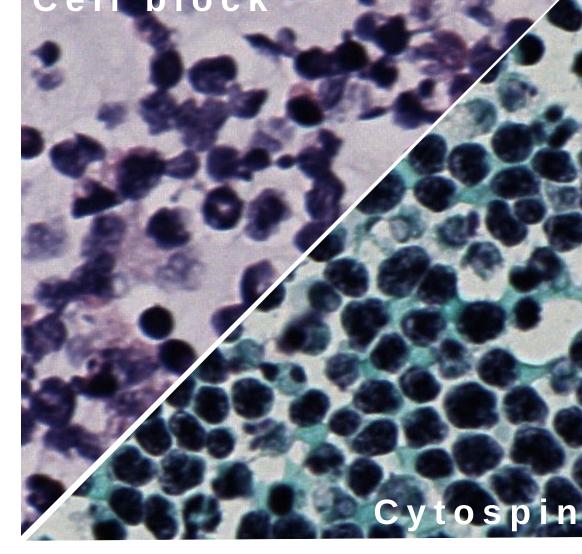
Results

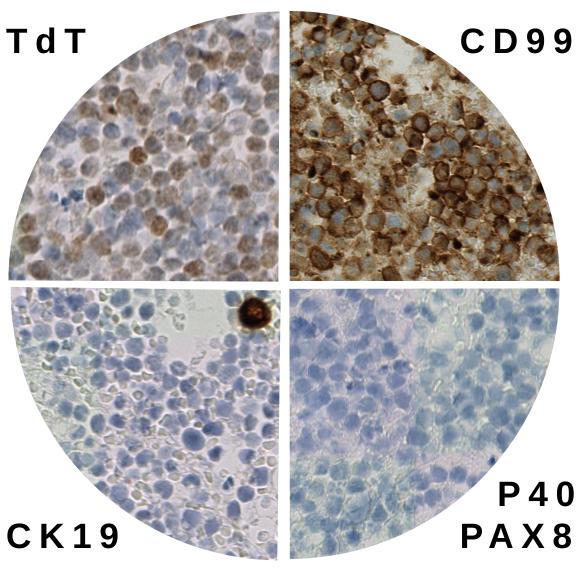
Small/medium size atypical cells were commonly seen in between scattered mesothelial cells. They showed high nuclear/cytoplasm ratio, anisonucleosis and clumsy chromatin. Immunophenotype was positive for CD99 and TdT. It was negative for P40, PAX8, CK19 and CK20. Pleural cavity involvement by thymoma was established.

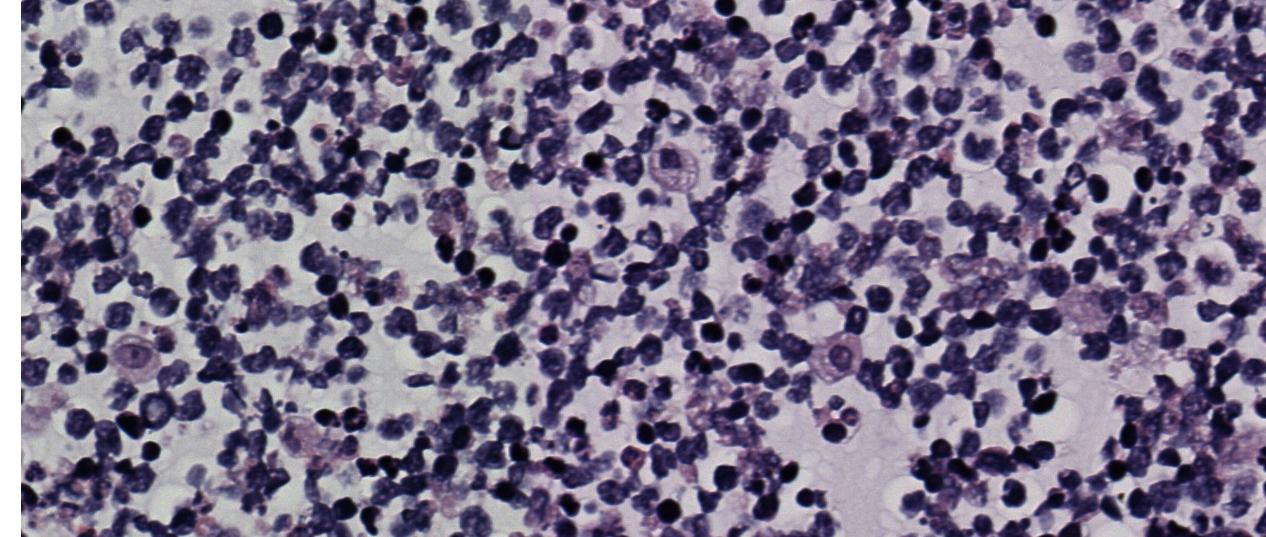
Conclusion

Thymomas can rarely give rise to pleural effusions. Diagnosis can be challenging. Detailed review of the patient's personal history and immunocytochemistry remains crucial to clarify differential diagnosis. Cell blocks, if available, can be very useful.









References

1. FURUYA K, ISOBE K, SANO G, KABURAKI K, GOCHO K, ISHIDA F, et al. Thymoma exhibiting spontaneous regression in size, pleural effusion and serum cytokeratin fragment level: A case report. Mol Clin Oncol [Internet]. 2015 Sep;3(5):1058-62. Das A, Pandit S, Choudhury S, Das S, Basuthakur S. Superior vena caval syndrome and ipsilateral pleural effusion: A rare presentation of anterior mediastinal thymoma. Lung India [Internet]. 2014;31(4):383. Biswas S, Shankar SH, Ray A, Ramteke P. Lymphoma versus thymoma: A diagnostic challenge. Drug Discov Ther [Internet]. 2020 Oct 31;14(5):249-51. Venegas RJ, Sun NC. Cardiac tamponade as a presentation of malignant thymoma. Acta Cytol [Internet]. 32(2):257-62. Markowiak T, Hofmann H-S, Ried M. Classification and staging of thymoma. J Thorac Dis [Internet]. 2020 Dec;12(12):7607-12. Kimura K, Kanzaki R, Kimura T, Kanou T, Ose N, Funaki S, et al. Long-Term Outcomes After Surgical Resection for Pleural Dissemination of Thymoma. Ann Surg Oncol [Internet]. 2019 Jul 28;26(7):2073-80.







