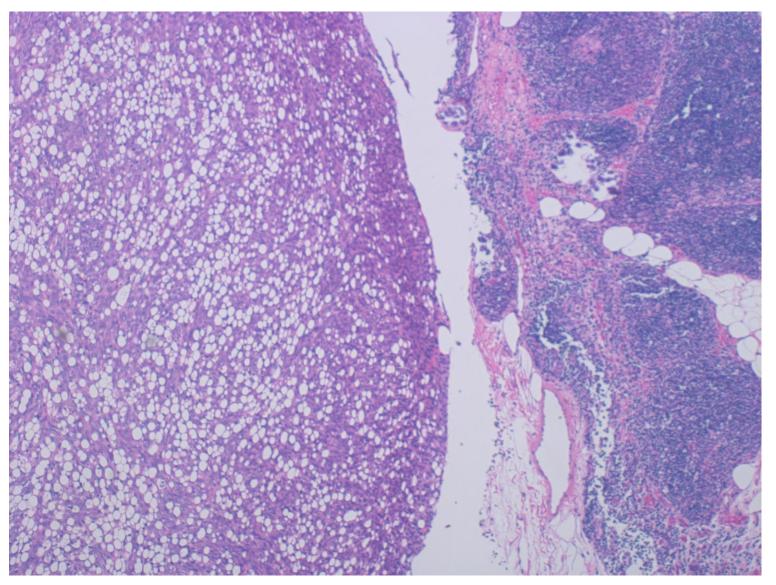
Thymoma, type A, containing fat vacuoles

Type A thymoma microscopically consists of bland and monomorphous oval/spindled cells. Lymphocytes are absent or very scanty. Variants may accompany a hemangiopericytoma-like vascular pattern, formation of rosettes/pseudorosettes or microcystic changes. Atypical type A thymoma is diagnosed, when focal hypercellularity, increased mitotic count or coagulative necrosis is observed.

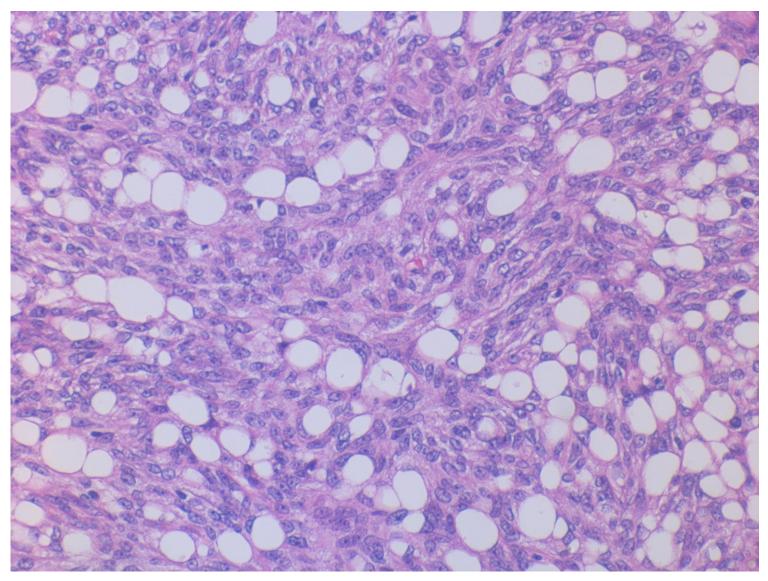
A 4 cm-sized anterior mediastinal mass was surgically excised from a 37-year-old man. No myasthenic symptoms were recorded. Microscopic diagnosis is type A thymoma. The bland spindled epithelial cells frequently contain large-sized fat vacuoles in the cytoplasm.

Ref.-1: Oramas DM, Moran CA. Thymoma: histologically a heterogenous group of tumors. Semin Diagn Pathol 2022; 39(2): 99-104. doi: 10.1053/j.semdp.2021.06.002

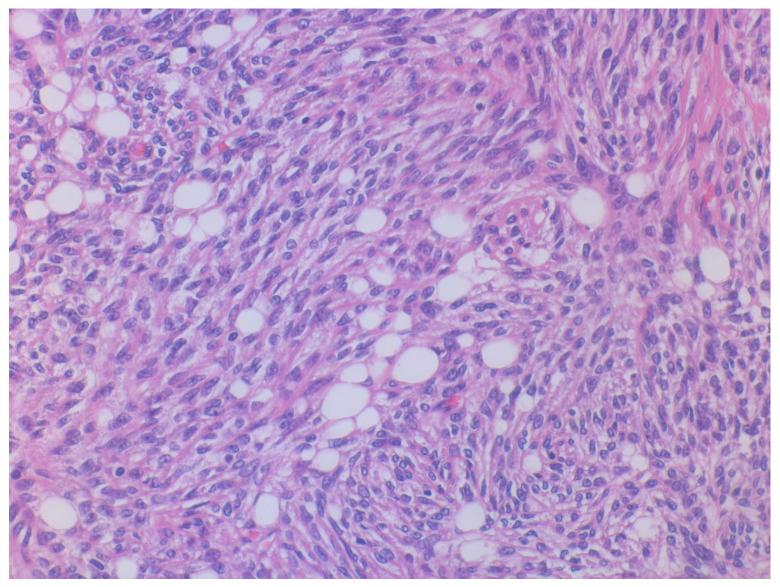
Ref.-2: Weissferdt A. Common thymomas: classification, histology, staging and prognosis. Diagnost Histopathol 2023; 29(2): 94-104. doi: 10.1016/j.mpdhp.2022.11.003



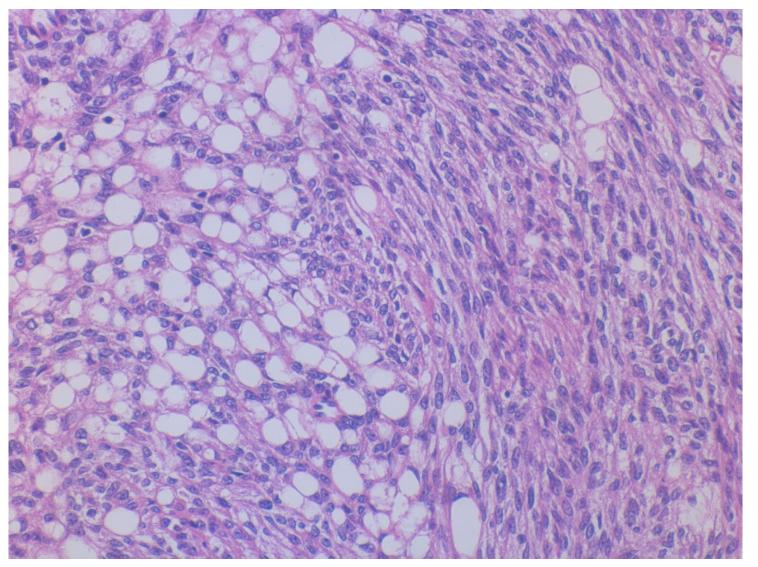
A well-demarcated type A thymoma seen in 37-year-old man is surrounded by involuted thymic tissue. Vacuolated cytoplasm is characteristic of the tumor cells. H&E-1



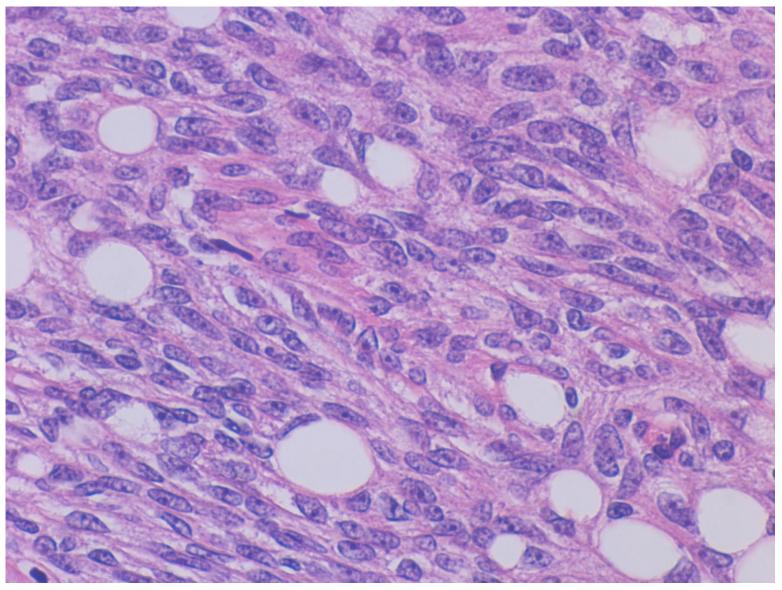
Type A thymoma seen in 37-year-old man consists of bland spindled cells frequently with vacuolated cytoplasm. No lymphocytes are observed in the background. H&E-2



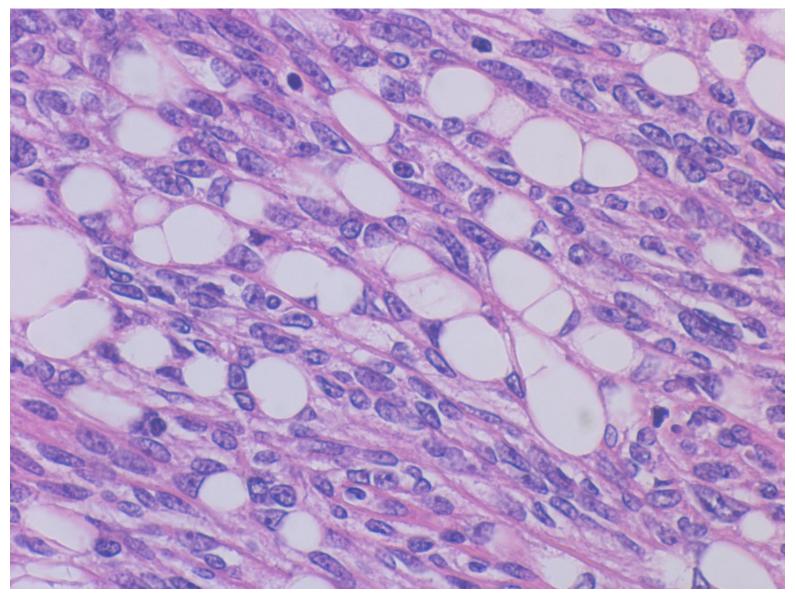
Type A thymoma seen in 37-year-old man consists of bland spindled cells frequently with vacuolated cytoplasm. No lymphocytes are observed in the background. H&E-3



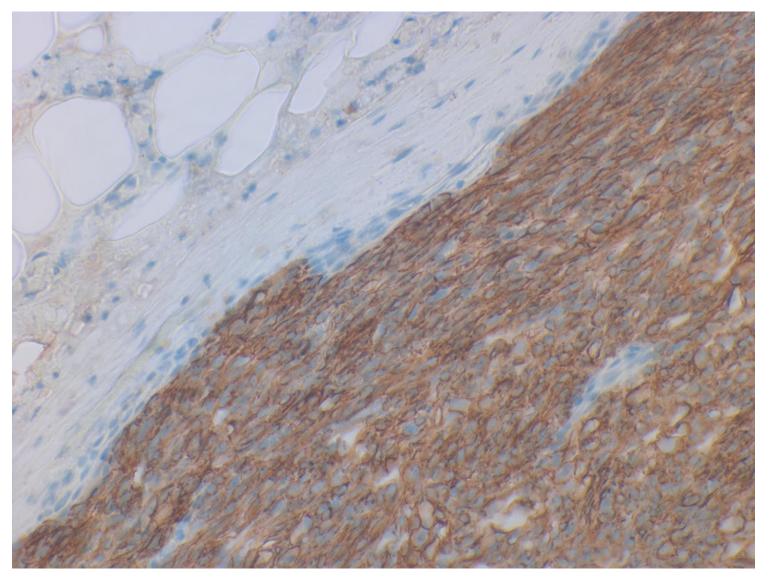
Type A thymoma seen in 37-year-old man consists of bland spindled cells frequently with vacuolated cytoplasm. No lymphocytes are observed in the background. H&E-4



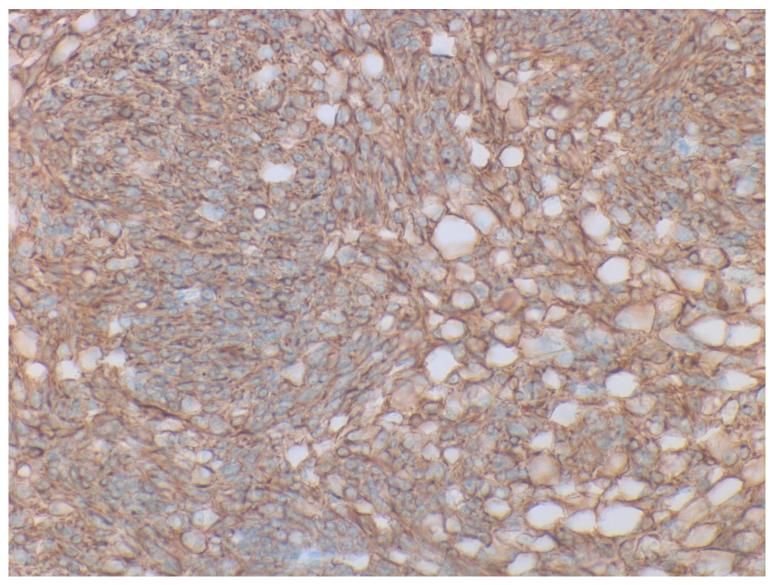
Type A thymoma seen in 37-year-old man consists of bland spindled cells frequently with vacuolated cytoplasm. No lymphocytes are observed in the background. H&E-5



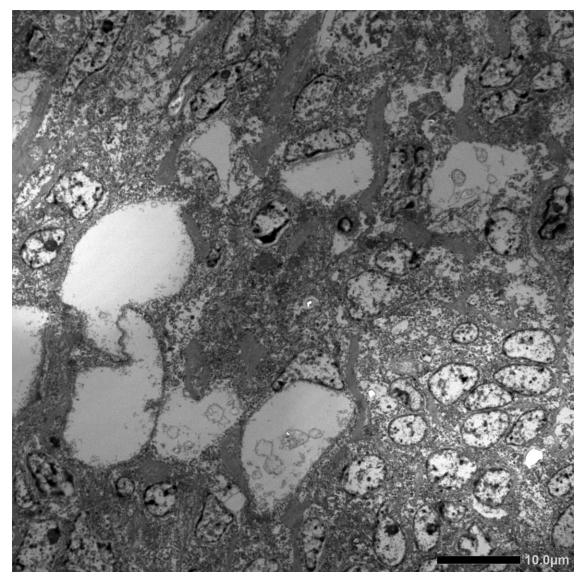
Type A thymoma seen in 37-year-old man consists of bland spindled cells frequently with vacuolated cytoplasm. No lymphocytes are observed in the background. H&E-6



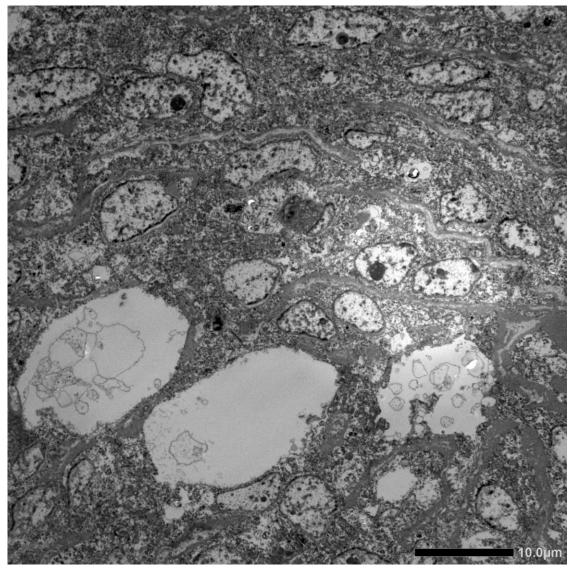
Demarcated type A thymoma seen in 37-year-old man shows diffuse expression of cytokeratins AE1/AE3. Immunostaining for cytokeratins (AE1/AE3)-1



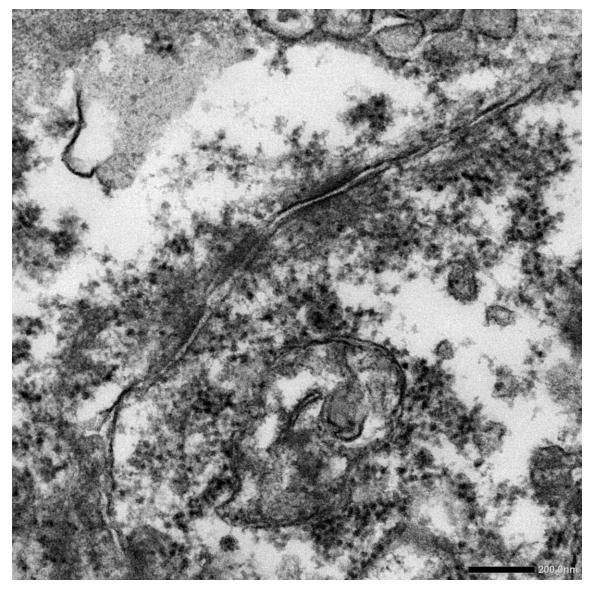
Type A thymoma seen in 37-year-old man shows diffuse expression of cytokeratins AE1/AE3. Immunostaining for cytokeratins (AE1/AE3)-2



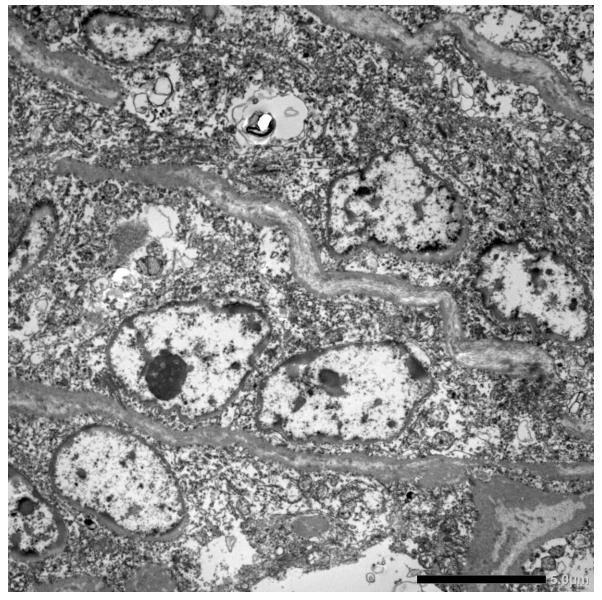
Ultrastructure of type A thymoma seen in 37-year-old man. Cytoplasmic vacuoles contain isolated or clustered membranous vesicles, representing fat droplets. EM-1



Ultrastructure of type A thymoma seen in 37-year-old man. Cytoplasmic vacuoles contain isolated or clustered membranous vesicles, representing fat droplets. EM-2



Ultrastructure of type A thymoma seen in 37-year-old man. Desmosomal junctions are formed between the tumor cells. EM-3



Ultrastructure of type A thymoma seen in 37-year-old man. Basal lamina are observed around the tumor cell nests. EM-4