Chapter 11

Tumors of the mediastinum
11.1 Thymic hyperplasia.

Picture 11-1

Thymic hyperplasia. A and B Enlarged thymus manifested by enlarged thymus due to hyperplasia with cortical and medullary differentiation. The other type (follicular hyperplasia, not shown) is hyperplastic lymphoid tissue with germinal centers.
11.2 Gross features of thymoma.

Picture 11-2 Gross features of thymoma. A Well developed capsule and lobulation. B Close-up showing multiple gray white microlobules with pointed edge separated by dense fibrous septa.
11.3  Type A thymoma.

Picture 11-3  Type A thymoma. It is composed of spindle and oval cell with scanty cytoplasm associated with few lymphocytes. There is no atypia in the thymic epithelium and T-lymphocytes (CD3 +) are mature in nature (TdT -).
11.4 Type AB thymoma.

Picture 11-4 Type AB thymoma. It is composed of a mixture of spindle and round neoplastic thymic epithelial cells with minimal atypia and associated lymphocytes.
11.5 Type B1 thymoma (lymphocyte-rich), low (A) and high power (B).

**Picture 11-5** Type B1 thymoma (lymphocyte-rich), low (A) and high power (B). In this type, the epithelial component is scanty, round in shape with minimal atypia. Lymphocytes predominate and rather immature.
11.6 Type B2 thymoma, low (A) and high power (B).

Picture 11-6 Type B2 thymoma, low (A) and high power (B). The rounded atypical thymic epithelial cells are almost equal to the lymphocytes which are rather immature.
11.7 Type B3 thymoma, (epithelium-rich).

Type B3 thymoma, (epithelium-rich). It is composed of polygonal cells with sharp cell borders and moderate atypia. Lymphocytes are scanty and immature. The epithelium of this type has a distinctive immunologic profile, namely; CK19+, CD5+, C-KIT+, GLUT-1+, and desmin +.
11.8 Organotypic features of thymoma.

**Picture 11-8** Organotypic features of thymoma. A Computer scan of a large section showing lobulation of fibrous septa and 3 serum lakes. B Microscopic picture of 2 serum lakes (not lined by endothelium). C Hassalle corpuscle is a keratotic squamous differentiation (metaplasia) of thymic epithelium.