



Pathology Page

Thymic carcinoid

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A 70-year-old man suffered from dyspnea for 3 months. Chest computed tomography showed a huge anterior mediastinal mass and he had surgery. Grossly, a well-defined, brownish mass 10 cm in diameter with focal hemorrhage was observed. Histopathology showed polygonal cells with a pepper salt nucleus and an eosinophilic cytoplasm arranged in a trabecular pattern diagnostic of a thymic carcinoid tumor (Fig. 1). Thymic carcinoids are well-

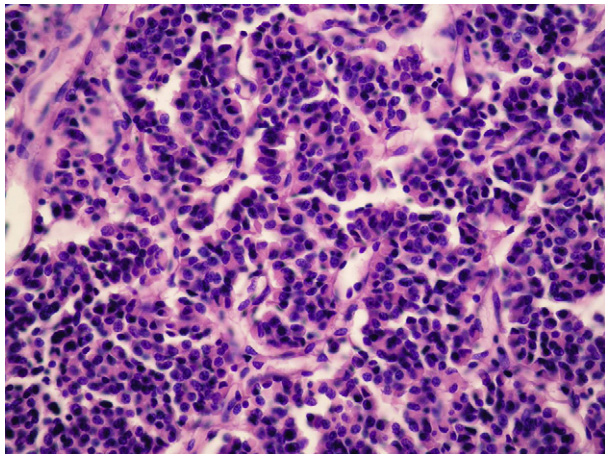


Fig. 1. Histopathology shows a carcinoid tumor composed of polygonal cells with a pepper salt nucleus and eosinophilic cytoplasm arranged in a trabecular pattern (hematoxylin and eosin $\times 400$).

differentiated neuroendocrine carcinomas, which are composed of polygonal cells with a granular cytoplasm arranged in ribbons, festoons, solid nests, and rosette-like glands. Tumors have less than two mitoses ($<2/10$ high-power field) and necrosis is absent. This tumor occurs in the anterior mediastinum. About 50% of patients with this tumor exhibit local symptoms (chest pain, cough, dyspnea, or superior vena cava syndrome). Carcinoid syndrome is exceedingly rare ($<1\%$) in thymic carcinoids. On the other hand, 17–30% of adult and more than 50% of childhood carcinoids of the thymus are associated with Cushing syndrome because of adrenocorticotrophic hormone production. Most thymic carcinoids are unencapsulated and can appear either circumscribed or grossly invasive. The tumor size ranges from 2 cm to 20 cm (mean 8–10 cm).

Locally restricted thymic carcinoids (encapsulated pT1 or infiltrating the mediastinum or thymus pT2) make up 40–50% of cases, but half of them exhibit local metastasis (pN1). Invasion into adjacent organs (40–50% pT3) or the pleural or pericardial cavity (10% pT4) is common. Metastases are present in 30–50% of cases.

Further reading

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