

## Malignant transformation of posterior mediastinal teratoma to adenocarcinoma

*Posterior mediastinal teratomun adenokarsinoma malign transformasyonu*

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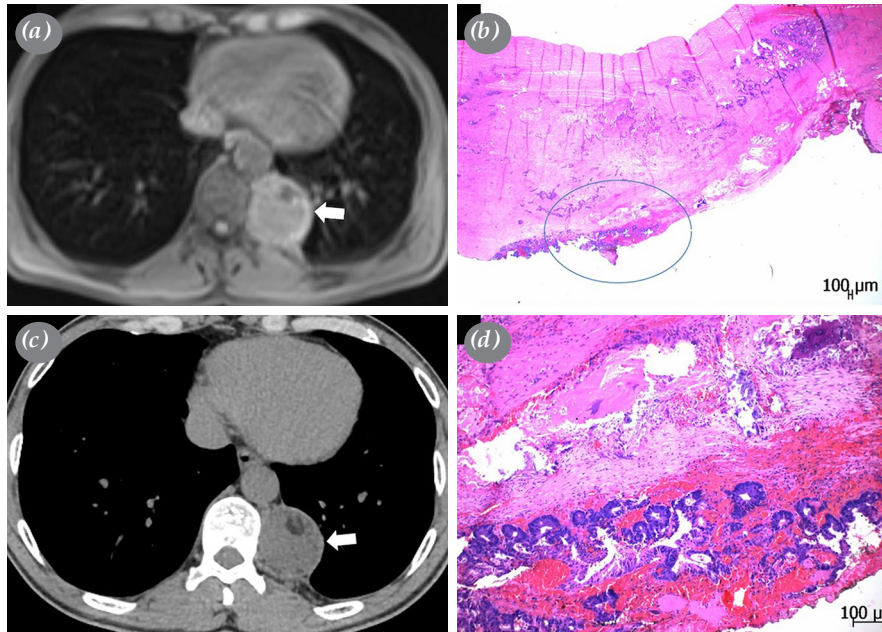
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A 43-year-old male presented with backache. Radiological evaluation revealed an appearance compatible with a posterior mediastinal cystic teratoma, which was also present in the images from seven years ago. Serum tumor markers (beta-HCG [human chorionic gonadotropin],

lactate dehydrogenase, and alpha-fetoprotein) levels were within normal ranges. The posterior mediastinal lesion was resected thoracoscopically. Histopathological examination of the cystic lesion revealed intestinal-type adenocarcinoma (Figure 1). Positron emission tomography-computed tomography



**Figure 1.** (a) Axial thoracic magnetic resonance imaging and (b) axial thoracic computed tomography sections of the mediastinum show a mature cystic teratoma located in the posterior mediastinal region (arrows). (c) Histological sections show a cyst-like structure and glandular structures with an infiltrative growth pattern on its wall. (d) Moderate to well-differentiated glands bordered by eosinophilic tall columnar cells with nuclear pseudostratification, filthy necrosis, and nuclear debris make up the adenocarcinoma.

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examination revealed no primary focus for the tumor. Upper gastrointestinal endoscopy and colonoscopic examination were normal.

Germ cell tumors are usually observed in the gonads, but they may rarely be seen in extragonadal regions. Benign cystic teratoma is an extragonadal germ cell tumor that can occur at any age and is mostly located in the anterior mediastinum, which is closely related to the thymus. Only 3 to 8% of cases are localized in the posterior mediastinum.<sup>[1]</sup> Malignant transformation may rarely be encountered in mediastinal teratomas. The association of mediastinal teratoma and intestinal type of adenocarcinoma is scarcely reported.<sup>[2]</sup> The coexistence of the posterior mediastinal location of teratoma and malignant transformation of adenocarcinoma should be kept in mind as a rare clinical entity.

**Patient Consent for Publication:** A written informed consent was obtained from the patient.

**Data Sharing Statement:** The data that support the findings of this study are available from the corresponding author upon reasonable request.

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