CASE IMAGE

Mediastinal mass compressing the right atrium

Sağ atriyuma bası yapan mediastinal kitle

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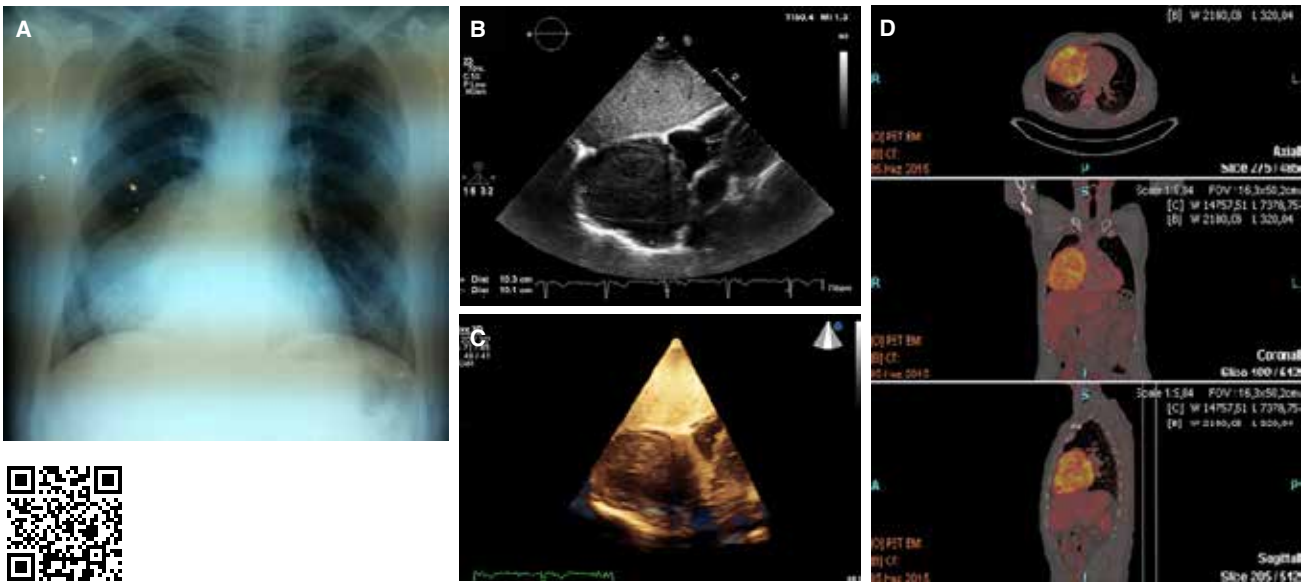
A 47-year-old man presented to the outpatient clinic complaining of dyspnea. Physical examination was unremarkable. Electrocardiogram was normal. Chest x-ray showed distortion of the right cardiac silhouette by a large mass (Figure A). Transthoracic echocardiogram showed significant compression of the right atrium due to a large mass measuring 10x10 cm (Figure B, C). Positron emission tomography/computed tomography (PET/CT) displayed increased heterogeneous F-18 fluorodeoxyglucose (FDG) uptake with standardized uptake value (SUV) max 8.6 and hypometabolic areas, suggesting presence of necrotic tissue (Figure D). A 15x15x15-cm and 890-g giant mass with capsule invasion was successfully resected with partial pericardiectomy. Intrapericardial, intravascular, and lung invasion were not observed. Histopathological examination revealed type B1 thymoma, according to World Health Organization classification. Chemotherapy was administered. Control PET/CT performed on fourth postoperative month showed no increased FDG uptake in surgical or other sites. Thymomas and lymphomas comprise the majority of anterior mediastinal masses. While frequently asymptomatic, they may present with chest pain, dyspnea, or vena cava syndrome, depending on the dissemination of the tumor. In addition to displaying the anatomy of the tumor, PET/CT shows heterogeneous metabolic activity of the thymoma. Resection remains the first option when a tumor aggressively invades the cardiac and vascular structures, or causes significant compression, as in the present case.



Figures– (A) Posterior/anterior chest x-ray displaying silhouette of a large mass on the right side of the heart. **(B, C)** Two-dimensional and 3-dimensional subcostal transthoracic views of a large mass compressing the right atrium. Hypo- and hypoechogenic areas are clearly depicted, suggesting heterogenous tissue. **(D)** Axial, coronal, and sagittal PET/CT scans show heterogenous FDG uptake, and depict mass and cardiac relationship.