



## Enteric adenocarcinoma arising from mediastinal teratoma in a man: A case report

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### Abstract

Teratomas are a type of germ cell tumor with malignant potential, located gonadal or extragonadal. Here, we reported a patient with enteric adenocarcinoma based on teratoma presenting with a mediastinal mass.

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### Introduction

Teratomas are types of germ cell tumor which can arise from gonads or extragonadal tissues and can show malignant transformation. Adenocarcinoma is the most common histological subtype in malignant transformation. In this article, a patient with enteric adenocarcinoma on the basis of teratoma presenting with a mediastinal mass invading the sternum is presented.<sup>1-3</sup>

### Case Report

A 54-year-old male patient presented with a swelling in the chest wall under the right neck that started 9 months ago and progressed (Figure 1). In the thoracic computed tomography of the patient, a mass causing lytic destructive changes with a lobulated contour of 68x57 mm in the right half of

the mediastinum and extending to the manubrium sterni in the anterior was detected. The pathological evaluation of trucut biopsy from the mass was reported as adenocarcinoma (Cytokeratin 20 and CDX2 positive, Cytokeratin 7, PSAP, TTF1, Napsin A, Chromogranin, Synaptophysin negative), but the histomorphological and immunohistochemical features of the tumor were not characteristic for conventional type pulmonary adenocarcinoma. It was recommended to exclude the possibility of metastatic carcinoma of gastrointestinal origin firstly. Esophagogastric endoscopy and colonoscopy, which was planned for the gastrointestinal screening of the patient, were unremarkable. However, the patient did not continue with the examination and treatment. The patient was admitted to the hospital 1 month ago with lack of oral intake and dyspnea after 6 months his first evaluation and a mass -12x12 cm- diameter was revealed on the sternum and



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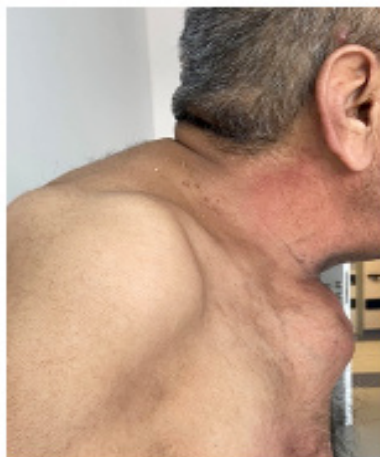
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**Figure 1.** The appearance of the lesion in the manubrium sterni area of the patient



**Figure 2.** The appearance of the lesion on the patient's scalp.

two masses 3 cm diameter was detected in the scalp. The patient who was tachypneic had severe dyspnea at rest and exertion. PET CT of the patient revealed that increased F-18 FDG uptake in lymph nodes with a diameter of 28x31 mm in the right supraclavicular area (SUV-max 4.45) and increased F-18 FDG uptake in the non-metabolic/necrotic-looking mass lesion with heterogeneous density, 84x124x151 mm in size (suv-max 8.22). The central part of mass was nonmetabolic and protruded under the skin and destructed the sternum by filling the mediastinum almost completely, showed significant expansion in the anterior and deviated the trachea to the left. Biopsy was repeated from the lesion on the manubrium sterni, and pathology result was reported as adenocarcinoma infiltration/metastasis, metastatic enteric adenocarcinoma developed on the teratoma background (TTF1, Napsin A, Psa, Cytokeratin 7, Chromogranin, Synaptophysin, MUC 5AC negative, Cytokeratin 20, EMA, CEA, CDX2, MUC 1 positive). Pathological examination of the 2x3 cm lesion on the scalp from the patient was evaluated to be consistent with adenocarcinoma metastasis (Figure 2). Upon the development of VCSS in the patient, 20 Gy in 5 fractions of 9400cGy/day (in sitting position because the patient could not lie down) was given palliatively. First step palliative chemotherapy was planned for the patient. In the follow-up after the first cycle, it was observed that the patient's clinical findings started to regress. Follow-up and treatment of the patient is still ongoing.

## Discussion

Although mediastinal teratomas show different clinical behaviors, they are associated with rapid progression and poor prognosis after malignant transformation. In cases where surgery is possible, survival is similar to patients without malignant transformation, but is incurable in metastatic patients.<sup>2,4</sup>

## Conflict of Interests

Authors declare that there are none.

## Acknowledgment

This study has been presented in 17<sup>th</sup> Uludag Internal Medicine National Winter Congress, 6<sup>th</sup> Bursa Family Medicine Association National Congress, 11<sup>th</sup> Uludag Internal Medicine Nursing Congress, 5–7 March 2021, Bursa, Turkey.

## References

1. Moran CA, Suster S. Primary germ cell tumors of the mediastinum: I. Analysis of 322 cases with special emphasis on teratomatous lesions and a proposal for histopathologic classification and clinical staging. *Cancer*. 1997 Aug 15;80(4):681-90.
2. Le Fèvre C, Vigneron C, Schuster H, Walter A, Marcellin L, Massard G, Lutz P, Noël G. Metastatic mediastinal mature teratoma with malignant transformation in a young man with an adenocarcinoma in a Klinefelter's syndrome: Case report and review of the literature. *Cancer Radiother*. 2018 May;22(3):255-263. doi: 10.1016/j.canrad.2017.10.006.
3. Arai K, Ohta S, Suzuki M, Suzuki H. Primary immature mediastinal teratoma in adulthood. *Eur J Surg Oncol*. 1997 Feb;23(1):64-7. doi: 10.1016/s0748-7983(97)80145-x.
4. Donadio AC, Motzer RJ, Bajorin DF, Kantoff PW, Sheinfeld J, Houldsworth J, Chaganti RS, Bosl GJ. Chemotherapy for teratoma with malignant transformation. *J Clin Oncol*. 2003 Dec 1;21(23):4285-91. doi: 10.1200/JCO.2003.01.019.



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