BRIEF HISTORY: A 26-year-old man was referred to the emergency department of our hospital following a car accident. The physical examination was unremarkable except reduced breath sounds over the left hemithorax. Results of blood serum tests were normal. Chest X-ray showed a huge space-occupying mass in almost half of the left hemithorax (Figure 1). The computed tomography (CT) scan showed a heterogeneous mass with focal fine calcifications in the anterior mediastinal area, with mild pressure effect on the arch of aorta (Figure 2). Based on CT scan results, germ cell tumor was suspected, after which beta human chorionic gonadotropin (β-HCG), α-fetoprotein (AFP), and lactate dehydrogenase (LDH) were ordered. They all were within the normal range. Anterior mediastinal teratoma was confirmed and en bloc resection of tumor and anterolateral thoracotomy was performed. The tumor contained sebaceous material as well as some hair and fat. A chest tube was placed and the chest wall was closed. Histopathology results confirmed the diagnosis of a mature cystic teratoma (Figure 3). The patient was discharged and subsequent follow-ups were unremarkable.

Of all anterior mediastinal tumors, 15-20% are germ cell tumors of which approximately 50% are benign teratomas. As these tumors arise from totipotent cells, they can contain all three embryonic germ layers but the dominant components are of ectodermal origin such as skin, sebaceous and neural tissue [1]. These tumors are of three types: mature, immature and rarely malignant. Mature type is the most common and is seen in approximately four-fifths of cases. In 95% of the cases, mediastinal teratomas are located in the anterior mediastinum. As these tumors grow slowly, up to 50–60% of patients may be asymptomatic at the time of diagnosis by X-ray. It is possible that a patient presents with symptoms such as dyspnea or chest pain [1]. Pathognomonic symptom of teratoma is productive cough with hair or sebum, which is caused by the rupture of the capsule containing the tumor and the material leaking into the tracheobronchial tree [1, 2]. In benign teratomas, serum levels of AFP and beta-HCG are normal [3]. Another pathognomonic finding is the observance of teeth within the mass. Also in 25% of the cases, calcification in the mass can be seen [1-4]. In diagnostic procedure of this tumor, radiographic findings could propose the existence of a mass in lung but they are not diagnostic for teratomas [5]. Computed tomography has been recognized as the most effective examination for the diagnosis of mediastinal tumors. Treatment of choice for benign teratoma is surgery but sometimes surgery is difficult because of great size of the tumor or involvement of other organs such as pericardium, lung, great vessels, thymus, chest wall, hilar structures, and diaphragm. It is also important to note that teratomas are resistant to radiotherapy and chemotherapy. Finally, prognosis is good after complete excision in benign teratomas and recurrence is rare [1].
REFERENCES

Figure 2: CT scan showing a mass with mixed view and ectodermal appendixes

Figure 3: Mature cystic teratoma