

Case	(653) Heart failure due to left atrial compression by mediastinal burkitt lymphoma
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CASE PRESENTATION

A 20 years-old man with bronchial asthma, was admitted to the emergency room due to progressive dyspnea and chest pain for the previous week, without fever or other symptoms.

The chest x-ray showed vascular redistribution, reticular interstitial pattern with B Kerley lines, perihilar consolidations and bilateral pleural effusion without cardiomegaly. Displacement of the azigo-esophageal-pleural line was noted. The lateral projection showed the back edge of the left atrium erased suggesting mediastinal occupation. The presumptive diagnosis was left heart failure due to mediastinal mass.

Body CT confirmed the findings, showing left atrial and pulmonary veins compression due to large tumor mass without extrathoracic disease.

Cardiorespiratory instability developed and the patient was admitted in ICU. Thoracoscopy was performed and the biopsy result was Burkitt lymphoma. Chemotherapy was started with significant reduction of tumor volume and heart failure resolution.

DISCUSSION

Mediastinal primary lymphomas are more frequent in anterior mediastinum and can compress the large blood vessels, mainly veins, triggering superior vena cava syndrome.

The most frequent mediastinal lymphomas are Hodgkin disease and large B-cell NHL.

Mediastinal Burkitt lymphoma is very unusual. Burkitt lymphoma is an aggressive B-cell lymphoma accounts for the most frequent pediatric lymphoma and less than 1% of adults under the age of 30 lymphomas, with male dominance. The sporadic form is the most frequent in Europe and USA and it is characterized by rapid growth abdominal masses.

A rapid growth lymphoid tumor with a strategic mediastinal localization, represents a potentially lethal clinical picture. Early diagnosis and treatment are crucial to improve the prognosis.

The chest x-ray ruled out other causes of dyspnea, allowed to diagnosis heart failure without cardiomegaly and suggested the mediastinal mass that was confirmed with CT.

CONCLUSION

Heart failure without cardiomegaly is a diagnostic challenge where mediastinal masses must be included in the differential diagnosis, especially in young patients. Mediastinal tumors may cause rapidly progressive vascular compromise, mainly Burkitt lymphoma. In these cases the radiology plays a key role to improve early diagnosis.



Chest x-ray (A and C) shows left heart failure, azigo-esophageal-pleural line displacement and carina widening. Thorax CT coronal and sagittal images (B and D) confirms these findings and also demonstrates left atrial compression due to a mediastinal mass

BIBLIOGRAPHY

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