Resolution of a Giant Invasive Mediastinal Lymphoma

Dev İnvaziv Mediastinal Lenfomanın Tedaviye Yanıtı

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Summary

We reported a rare case of diffuse large B-cell lymphoma arising from posterior mediastinum. Heart, aorta, and esophagus had been invaded by the huge tumor. The patient was treated with R-CHOP chemotherapy and improved dramatically. *(The Archives of Lung 2007; 8: 134-6)*

Key words: Exploratory thoracotomy, Large B-cell lymphoma, Mediastinum

Özet

Bu çalışmada posterior mediastenden köken alan nadir bir diffüz large B-cell lenfoma olgusu sunuldu. Kalp, aorta ve özefagus dev tümör tarafından invaze edilmişti. R-CHOP tedavisi verilen hasta dramatik bir şekilde düzeldi. *(Akciğer Arşivi 2007; 8: 134-6)*

Anahtar Kelimeler: Exploratris torakotomi, Large B-cell lenfoma, Mediastinum

Introduction

According to the WHO classification of neoplastic diseases of haemopoietic and lymphoid tissues, diffuse large cell lymphoma comprises about 40% of adult cases of non-Hodgkin lymphoma. It consists of morphological variants. Mediastinal diffuse large B-cell lymphoma is considered a subtype and it is an aggressive disease and has poor outcome (1-4).

In our report we presented case, with aggressive invasion to vital structures in mediastinum, who were treated successfully with R-CHOP.

Case

A 47-year-old man was admitted with a 2-month history of dysphagia, and weight loss. Physical examination and chest x-ray of the patient revealed no abnormality. Subsequently performed computed tomographic (CT) scanning (Fig 1) demonstrated a large tumor in the middle mediastinum with infiltration of descending thoracic aorta, and distal esophagus. The tumor compressed and partially invaded the heart.

Esophagoscopy revealed external compression to the esophagus (Fig 2), 30 cm from the incisors teeth, with intact esophageal mucosa. He underwent an exploratory thoracotomy. The tumor was stiff in nature. The visceral mediastinum was almost frozen. It was hard to determine the degree of atrial and esophageal invasion. Incisional biopsy and lymph node sampling (station 6 and 9) were performed. Pathological examination of tumoral tissue and lymph node showed diffuse large B-cell lymphoma (Fig 3). Tumoral cells were stained diffusely with CD20 and focally with CD79a. The diagnosis was determined as lymphoma. Six cures R-CHOP therapy was given to the patient within 5 months. Control CT examination was quite normal at the 6th months of admission (Fig 4).

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Discussion

Invasive diagnostic procedures such as; mediastinoscopy, thoracoscopy, and thoracotomy are performed for diagnosis and staging in lung cancers, even though technical advances in radiology (5). In patients without any histologic evidence, we should performed invasive procedures. The sensitivity, spesifity, and accuracy of these tools are changing between 80-100% (5). The lesion was out of the scope of the "mediastinoscopy" and we thought that "thoracoscopy" would be technically difficult. We have reached the final diagnosis by exploratory thoracotomy in our case.

NHL (Non-Hodgkin's Lymphoma) represents as a mediastinal mass which has the diameter usually greater than 10cm in two-thirds of patients. CT scan of the thorax and the abdomen is crucial because enlarging masses often invade contagious structures such as pleura, pericardium, heart, vessels, and chest wall (2-4). In our case, tumor size was greater than 10cm and tumor invaded esophagus, heart, and aorta.

It is commonly accepted that the CHOP regimen is an effective first line treatment in intermediate and high-grade lymphomas. On the other hand Coiffier et al. reported that R-CHOP was superior than CHOP especially in patients, older than 60 years (6). In recent years the MInT study has showed that R-CHOP is also effective in patients younger than 60 years (7). Complete remission was obtained in our patients with R-CHOP, these findings were also supported the MInT report.

At the beginning, the situation was troublesome for our patient due to aggressive nature of the tumor. We obtained tissue diagnosis as soon as possible, and the situation became hopeful. This case also showed us that a good collaboration with surgeons and oncologs give better results (Fig 4).

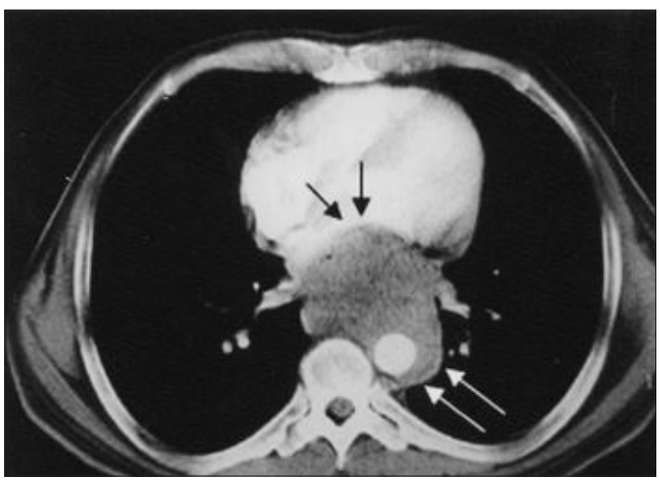


Figure 1. Lower section of CT showed invasion of the left ventricle, inferior pulmonary vein, esophagus and descending aorta (more than 270º) by the tumor mass (arrows)

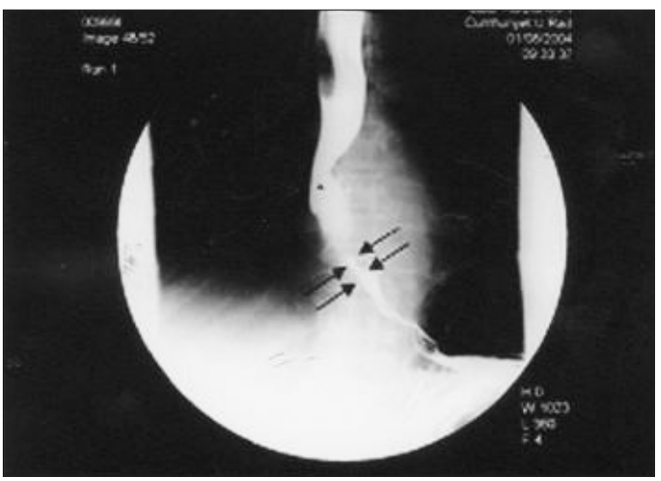
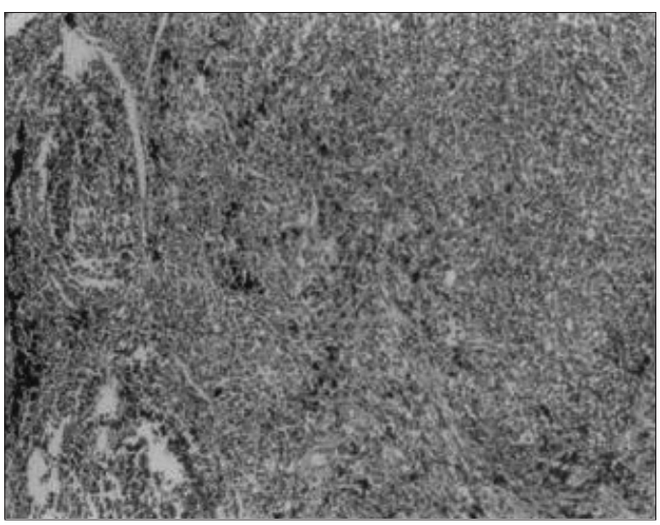


Figure 2. Barium esophagography showed compression and filling defect at distal part of the esophagus (arrows)



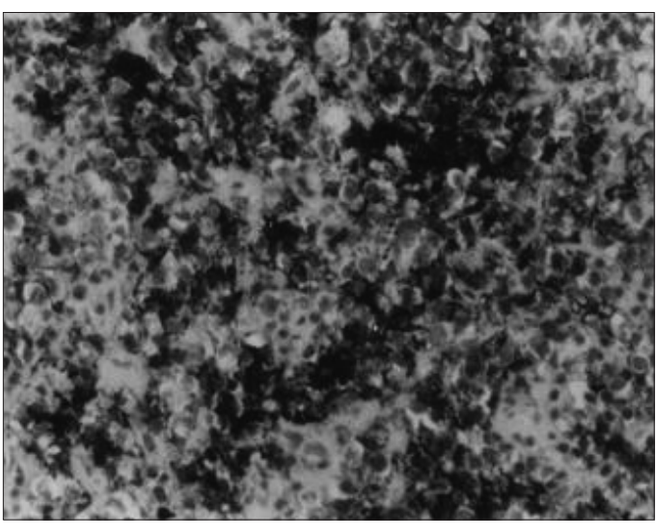


Figure 3a-b. (a) Follicular structures with anthrocotic pigmentation at one side and diffuse large monotonous proliferation of malignant lymphoma (HE; X10). (b) Tumoral cells were stained diffusely with CD20 (avidin-biotin; X100)

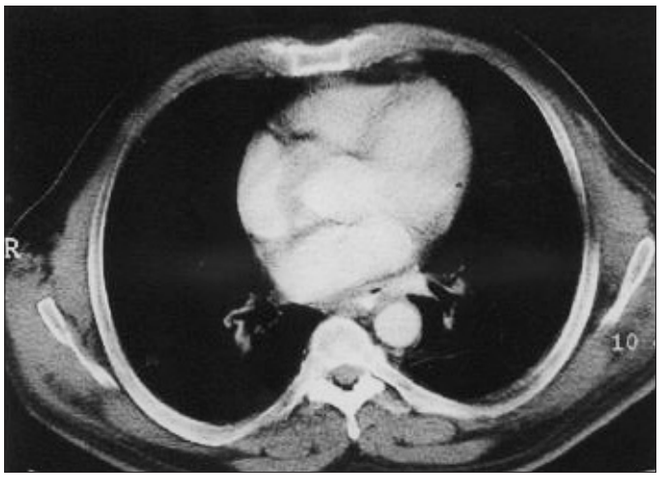


Figure 4. CT examination is quite normal after six cure of chemotherapy

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