

# Caso Clínico

## Clinical Case

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### Diagnóstico pouco usual de obstrução da traqueia

#### *Unusual diagnosis of tracheal obstruction*

Recebido para publicação/received for publication: 05.11.25

Aceite para publicação/accepted for publication: 06.03.24

#### Resumo

Homem, 54 anos, caucasiano e fumador, que recorreu ao serviço de urgência por apresentar tosse produtiva e expectoração hemoptóica desde há cerca de dois meses, motivo porque foi agendada broncofibroscopia. Apresentava neoformações sésseis, cerca de 2 cm abaixo das cordas vocais e ao longo da vertente póstero-lateral do terço médio da traqueia, que condicionavam obstrução significativa, motivo pelo qual foi realizada broncoscopia rígida para colocação de prótese endotraqueal.

Dada a instabilidade clínica e grande suspeição de malignidade o doente inicia radioterapia. O

#### Abstract

Male, 54 years old, with smoking habits. The patient complaints were cough, with bleeding secretions in the previous two months. Because of the persistence of the symptoms, a bronchoscopy was proposed. This exam showed multiple lesions in the trachea, nearly 2 cm above the vocal cords that compromised the airway and did not allow the progression of the bronchoscope. For this reason, it was decided to introduce a tracheal prosthesis. Because of instability, and the suspicion of malignancy we started thoracic irradiation. The histological specimen was compatible with anaplastic Lymphoma, CD 30+.

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diagnóstico obtido foi de linfoma anaplásico de células grandes, CD 30+. Por insuficiência respiratória, com estridor, foi necessário retirar a prótese que se encontrava obstruída por um rolhão de secreções, ficando a traqueia patente.

O doente teve alta, estando actualmente estabilizado do ponto de vista respiratório e submetido a quimioterapia com CHOP (Ciclophosphamide, Adriamycin or Hydroxydorubicin, Vincristine or Oncovin and Prednisone).

O linfoma de grandes células primário do mediastino corresponde a 11.5% dos linfomas de grandes células (2% dos linfomas não Hodgkin). Apesar da maioria dos estudos o classificarem como incurável, há registos de resultados positivos com o recurso à irradiação mediastínica combinada com quimioterapia podendo, quando existe compromisso da via aérea, a colocação de uma prótese permitir a patência da mesma.

Rev Port Pneumol 2006; XII (3): 303-308

**Palavras-chave:** Traqueia, prótese, linfoma anaplásico.

Because of respiratory distress, with stridor, the prosthesis was removed. The trachea was permeable after this.

The patient was discharged and oriented to Clinical Haematology. He is clinically stable and under monitoring, having now completed a chemotherapy treatment with CHOP (Ciclophosphamide, Adriamycin or Hydroxydorubicin, Vincristine or Oncovin and Prednisone).

The primary mediastinal Large Cells Lymphoma represents 11.5% of the Large Cells Lymphomas (2% of the non-Hodgkin's Lymphomas). This neoplasm is in many studies considered incurable, but there are some positive results with the combination of radiotherapy and chemotherapy. If there is any airway compromise, the tracheal prosthesis may be one option for the resolution of the respiratory insufficiency.

Rev Port Pneumol 2006; XII (3): 303-308

**Key-words:** Traqueia, prosthesis, anaplastic lymphoma.

### Case report

The authors describe the case of a man, Caucasian, smoker (10 packs-years), previously healthy.

After many admissions at our Emergency Room over the last two months with productive cough (haemoptoic secretions) and

treated with antibiotics (which he can not specify), the patient was directed to our consultation. Beyond the cough he had no other symptoms such as night sweats, fever or loss of weight.

At first visit, the patient had no evident respiratory insufficiency. The analytic

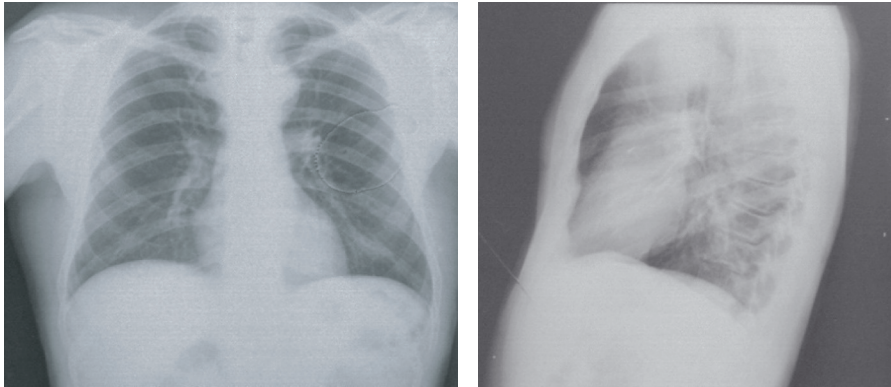


Fig. 1

study performed revealed no alterations, and the thorax x-ray (Fig. 1) did not show any pleural or parenchyma alterations, but an enlargement of the superior mediastinum was evident.

Later, because of the persistence of the complaints the thoracic x-ray was repeated, and in this one an infiltration in the right inferior lobe (Fig. 2) was evident. For this reason a flexible bronchoscopy was performed (Fig. 3).



Fig. 2

This last exam showed a non-pediculated sub-mucous lesion, nearly 2cm above the vocal cords, to the inferior third of the trachea. During the flexible bronchoscopy, a biopsy of this mass was performed, without any complications.

This lesion was almost completely obstructing the airways, so it was decided to introduce a tracheal prosthesis, which stayed well positioned and permeable (Fig. 4). A few hours later, the patient showed respiratory distress and had stridor. The prosthesis was reassessed and a proximal migration confirmed (probably VFA the cough). The prosthesis was replaced by a shorter one (Fig. 5 on the

right) with 16/40. However, 48 hours later the patient had the same complaints, and it was necessary to remove the endotraqueal prosthesis. At this time, we decided not to replace it, but the patient became cyanotic and with stridor, so a new and longer prosthesis was introduced (Fig. 5 on the left), with 16/50. This last prosthesis, although well positioned, was removed a few days later, because it was obstructed with secretions.

Meanwhile a thoracic CT scan was performed and it showed a mediastinal mass

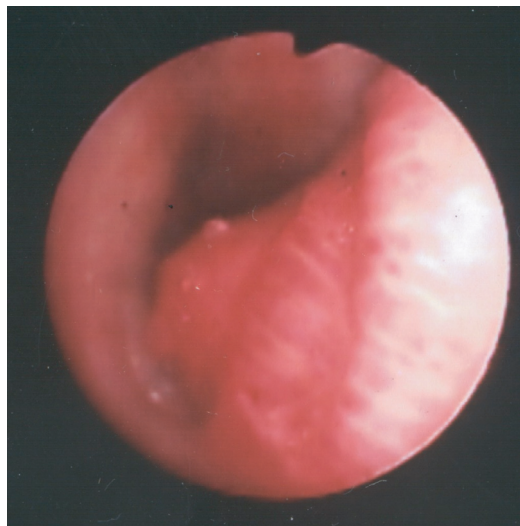


Fig. 3

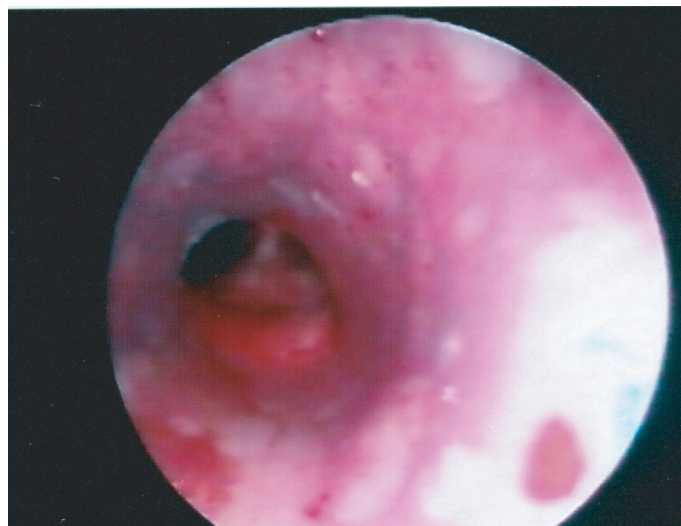


Fig. 4



Fig. 5

that was invading the trachea (Fig. 6). The histological specimen was very suggestive of malignancy and the patient behaviour was very unstable, so we decided to initiate thoracic irradiation. Later the definitive evaluation confirmed the malignancy of the lesion, which was an Anaplastic Large Cells Lymphoma, CD 30+. The patient was discharged, and directed to Clinical Haematology. Currently after a chemotherapy treatment with CHOP (Ciclophosphamide, Adriamycin or Hydroxydorubicin, Vincristine or Oncovin and Prednisone), he is stable, with no respiratory symptoms.

### Discussion

The Anaplastic Large Cells Lymphoma represents nearly 2% of the non-Hodgkin's Lymphomas in adults, but is considered the second most frequent type of T Lymphomas<sup>1</sup>. They were described as

## DIAGNÓSTICO POUCO USUAL DE OBSTRUÇÃO DA TRAQUEIA

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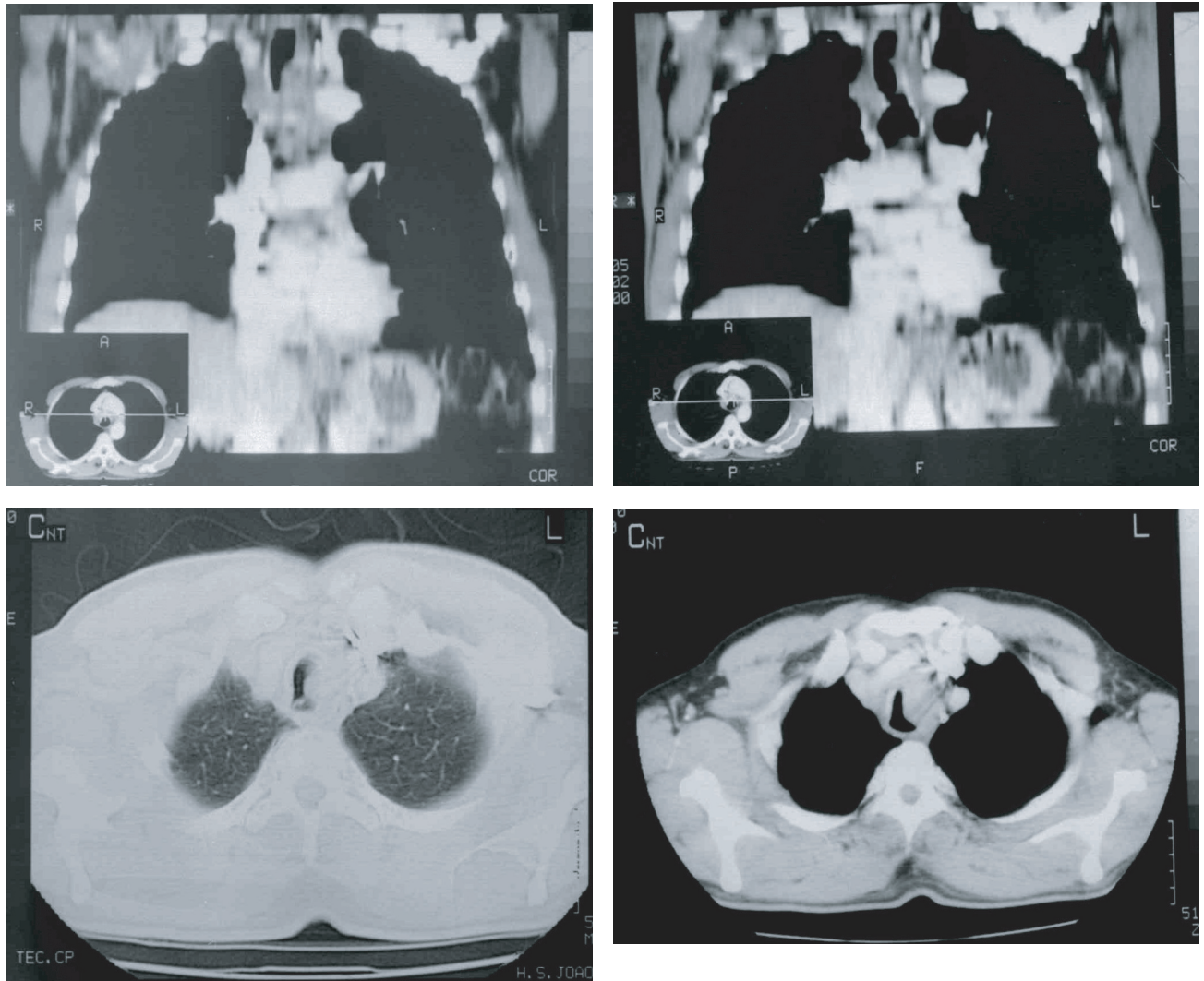


Fig. 6

having two presentation forms: the Cutaneous Anaplastic Lymphoma of Large Cells (described as clinically benign, with a good and slow progression), with cutaneous lesions that are not related to a previous linfoproliferative disease and the Anaplastic Lymphoma of Large Cells with systemic expression<sup>2</sup>. In both forms of the disease, the expression of the CD

30 is described. although initially this marker was described only in Hodgkin's Lymphomas and in active B and T lymph cells<sup>3</sup>.

The mediastinal localization of this Lymphomas represents almost 11.5% of all mediastinal tumours, and differential diagnostic of another mediastinal neoplasm such as timomas, small cell lung cancer or germ

cells tumours<sup>4</sup> must be considered. Despite the histological pattern, the clinical manifestations are usually thoracic, with the Superior Vena Cava syndrome and the airways obstruction the more frequent.

In adults, these kind of tumours are considered aggressive, but curable<sup>5,6</sup> with chemotherapy and thoracic irradiation schemes of therapy<sup>6</sup>.

In the beginning, the evaluation of this patient did not consider the existence of tracheal lesion. We never suspected that there was any compromise of main airways, since the patient did not mention any complaints, and the physical exam did not alert us to the hypothesis. But it was that obstruction that induced the instrumentation and intention of permeabilizing the airways. Because we did not manage to maintain the permeability of the airways and the prosthesis position, we decided to initiate thoracic radiotherapy. This decision is contradictory, because we did not have a definitive diagnosis of malignancy, but it was taken due to the instability and the risk to the life of the patient and to our inability to maintain the

airway permeability by mechanic means, assuming all the risks of thoracic irradiation.

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