

## A Dyspnea

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**Received:** January 12, 2024; **Published:** March 19, 2024

**Keywords:** Dyspnea; Metastases; Balloon Release; Cannonball metastases

### *The Story*

A 60-year-old patient, with no history, non-smoking, consulted for dyspnea with chest pain that had been progressing for five days in the context of apyrexia. A significant weight loss had been noted for 1 month. Physical examination revealed an isolated tachypnea with no evidence of respiratory struggle. Biologically, leukopenia was found (1800) with a moderate increase in CRP (40 mg/l). A chest CT scan was performed (Figs. 1 and 2).

### *Diagnosis*

Diffuse lung metastases with a “balloon release” appearance.

### *Comments*

The lung is one of the main organs affected by metastatic damage. Diffuse nodular involvement reflects haematogenous dissemination from a primary tumor, whether pulmonary or extrathoracic. The pulmonary nodules achieve the characteristic “balloon release” or “cannonball” appearance.

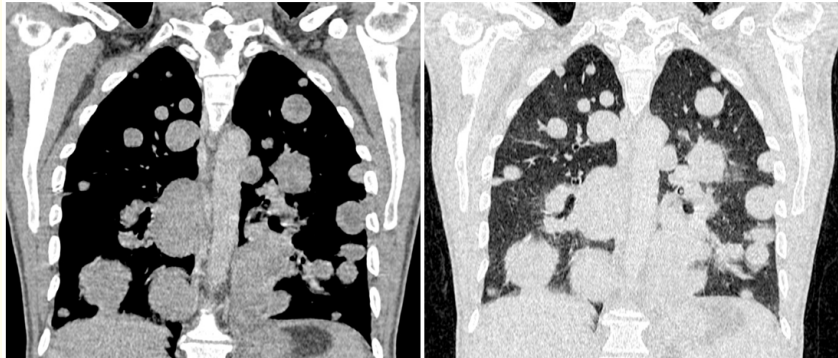
Cancers involved in metastatic dissemination are characterized by a rich venous return draining directly into the systemic circulation. are the breast, colon, rectum, lung, kidney, and prostate [1]. In our patient, the primary was cholangiocarcinoma.

Outside of the neoplastic context, infections, systemic diseases and arteriovenous malformations may be responsible for disseminated nodular involvement [2].

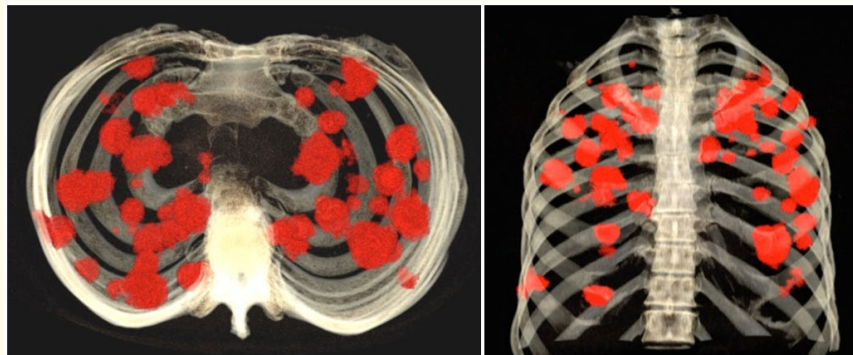
Clinically, metastatic involvement is often symptomatic, dominated by respiratory discomfort.

Frontal chest X-ray can be used to suspect the diagnosis, by showing several nodular opacities, affecting both pulmonary fields. Computed tomography, which is much more sensitive, confirms the diagnosis by objectifying the diffuse and massive nodular involvement made up of nodules and masses, with a sparse, proximal and peripheral distribution, rounded and well limited, achieving a “balloon release” or “cannonball” appearance.

Metastatic pulmonary involvement in “balloon release” is common and has a poor prognosis [3].



**Figure 1:** Chest CT scan in coronal sections, in mediastinal windows (a) parenchymal (b) showing pulmonary masses and nodules, diffuse, sparsely distributed, occupying both pulmonary hemifields, sparing no segment, round in shape, regular and dense contours.



**Figure 2:** Volume reconstructions in axial (a) and coronal (b) views, illustrating the characteristic “balloon release” appearance.

## References

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Volume 6 Issue 4 April 2024

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