

# Image Spotter

Souvik Das<sup>1</sup>, Atanu Chandra<sup>2</sup>

Received on: 17 December 2022; Accepted on: 26 December 2022; Published on: 06 January 2023

Bengal Physician Journal (2022): 10.5005/jp-journals-10070-7095

A 25-year-old man without any known comorbidity presented with a 2-month history of painful swelling over the lateral aspect of his left knee, along with cough and progressive dyspnea for the last 1 month. Physical examinations showed a hard, globular swelling of 4 × 4 cm<sup>2</sup> in size on the lateral aspect of the lower third of his left knee; there was mild warmth and tenderness over the surface without any overlying scars, sinuses, or engorged veins. Examination of the chest revealed wheezing with scattered crackles over both lung fields. A biopsy from the bony swelling revealed a cystic lesion lined by multinucleated giant cells, sheets of mononuclear cells with a pleomorphic malignant spindle cell component, suggestive of a malignant giant cell tumor of bone. Chest radiography showed bilateral multiple rounded nodular opacities (Fig. 1A). Computed tomography (CT) scan of the thorax with contrast demonstrated multiple large well-defined heterogeneously enhancing subpleural and intrapulmonary space-occupying lesions (SOLs), consistent with cannonball pulmonary metastases (Figs 1B and C). Fine needle aspiration from one pulmonary nodule showed degenerated inflammatory cells, macrophages, some multinucleated osteoclast-like giant cells, and spindle-shaped mononuclear cells. A diagnosis of a malignant giant cell tumor of the left femur with multiple pulmonary metastases was made. The patient was shifted to the Department of Medical Oncology for further management.

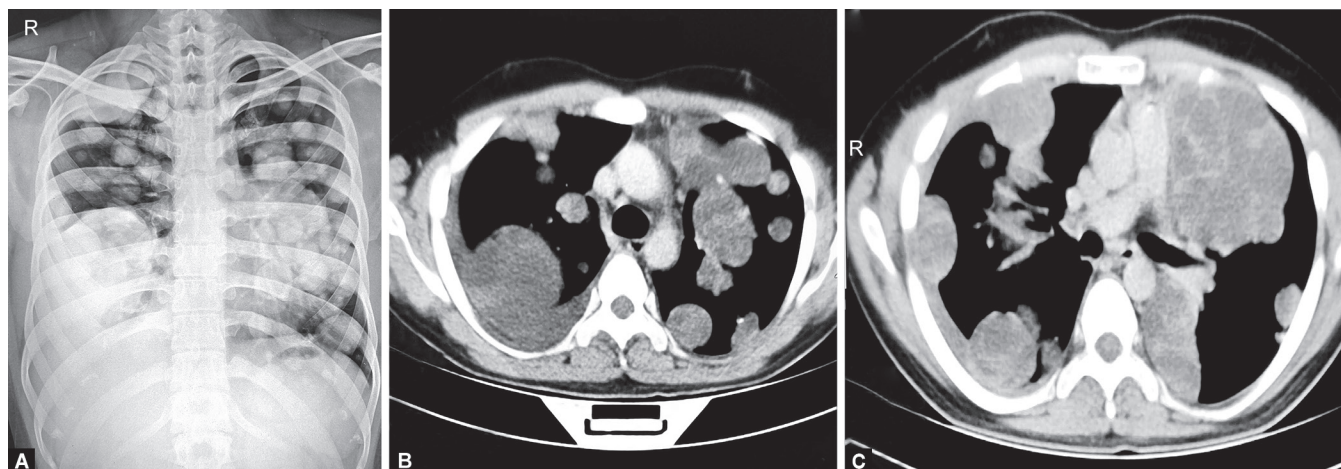
<sup>1,2</sup>Department of Internal Medicine, Bankura Sammilani Medical College and Hospital, Bankura, West Bengal, India

**How to cite this article:** Das S, Chandra A. Image Spotter. Bengal Physician Journal 2022;9(3):80.

**Source of support:** Nil

**Conflict of interest:** None

Cannonball shadows refer to well-defined, large, rounded shadows in lung fields on chest imaging, which are commonly caused by pulmonary metastases. Cannonball lung metastases are classically seen in renal cell carcinoma, gestational and nongestational choriocarcinoma, sarcomas, and gastrointestinal malignancies. Although uncommon, this appearance has also been reported in carcinoma of the thyroid, endometrial carcinoma, prostate cancer, and hepatocellular carcinoma. In most instances, the presence of cannonball metastases indicates an advanced stage of cancer and portends a poor prognosis; however, a few cases of such presentation with relatively good prognosis have also been reported in the literature. We would like to highlight the classical radiological appearance of cannonball metastasis in chest imaging and its association with various malignancies.



Figs 1A to C: Final diagnosis: Cannonball pulmonary metastases