

Pneumotórax Bilateral Secundário e Pazopanib

Bilateral Pneumothorax and Pazopanib

Marta Dalila Martins (<https://orcid.org/0000-0002-0633-2546>), Dalila Parente (<https://orcid.org/0000-0003-0566-9769>), Diana Pereira Anjos (<https://orcid.org/0000-0001-8788-6155>), Inês Ferreira (<https://orcid.org/0000-0003-3275-9532>)

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Secondary spontaneous pneumothorax is defined as pneumothorax that presents as a complication of underlying lung disease.¹

Caucasian male, 77-years-old with history of synovial sarcoma with pulmonary metastasis, treated with pazopanib 400 mg/day for six months. Admitted to the emergency department complaining of dyspnoea. On examination: respiratory distress, hypoxia (peripheral oxygen saturation with high concentration mask of 96%), high blood pressure (BP: 219/119 mmHg), prolonged expiratory time and decreased vesicular murmur globally on pulmonary auscultation. Chest x-ray showed a bilateral pneumothorax (Fig. 1). The computed tomography (CT) confirmed the diagnosis and revealed a pleural

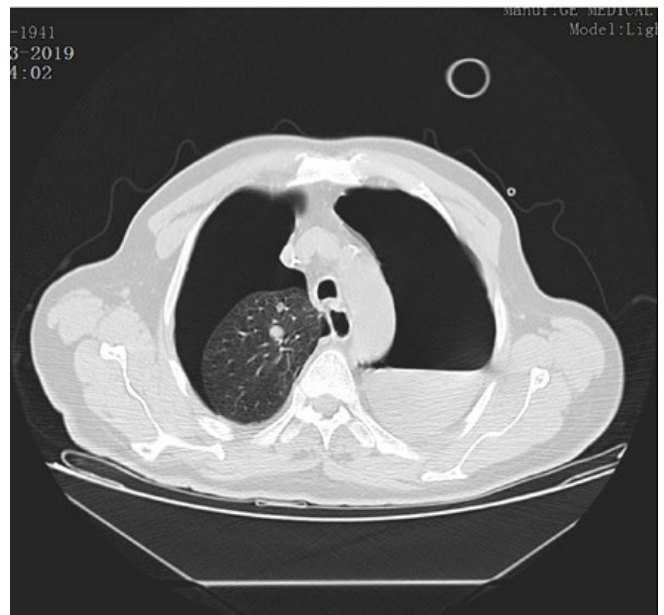


Figure 2: Axial CT scan of the chest.

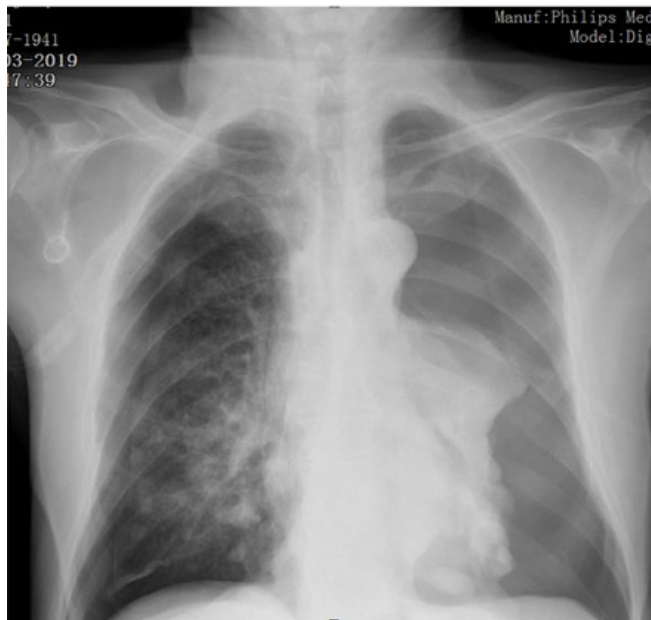


Figure 1: Postero-anterior chest X-ray.

effusion on the left side (Fig. 2). Two thoracic drains were then placed, with improvement of the dyspnoea, but due to persistent air leak, bilateral pleurodesis was performed. The patient showed a progressive clinical improvement, and the chest tubes were removed, without relapse of the pneumothorax. One year later, the patient ended up dying.

The tyrosine kinase inhibitor pazopanib is used for urothelial tumours, renal cell carcinoma, pancreatic neuroendocrine tumour, and metastasis of cervical cancer, particularly for soft tissue sarcomas.² Recent studies have suggested that the use of pazopanib may lead to the development of pneumothorax, an unexpected adverse effect in patients with sarcoma metastatic to the chest.³ In the literature, the rate of pneumothorax caused by pazopanib is about 10% to 14%.⁴ Many questions remain regarding the casual relationship between the two as well as regarding the mechanism.⁵

In conclusion, the tyrosine kinase inhibitor pazopanib is used in the treatment of sarcomas, but recent studies have showed a higher incidence of pneumothorax as an adverse side effect, particularly when lung metastasis are present.⁶ Although its mechanism remains unknown, the prognosis is poorer in this group of patients, with an one year mortality after pneumothorax of 75%.³ Further studies are warranted to better select the patients suitable to undergo this treatment. ■

Serviço Medicina Interna, Centro Hospitalar Tâmega e Sousa, Penafiel, Portugal

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Correspondence / Correspondência:

Marta Dalila Martins – 74029@chts.min-saude.pt

Serviço de Medicina Interna, Centro Hospitalar Tâmega e Sousa, Penafiel, Portugal

Avenida do Hospital Padre Américo, nº210, 4560-136, Guilhufe - Penafiel.

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