



An undescribed cause of hemoptysis

Marta Carvalho Silva¹, João Filipe Cruz¹

A 59-year-old female smoker with a history of breast cancer that was treated with surgery, chemotherapy, and hormone therapy went to the ER with a first episode of hemoptysis and productive cough. Blood analyses were normal and chest CT excluded pulmonary embolism but revealed the presence of mild bronchiectasis and a pulmonary infectious process with endobronchial dissemination. It also showed the presence of a tubular structure within the pulmonary artery, probably a central venous catheter (CVC), with one end in the branch of the posterior segment of the right upper lobe and the other end in the segmental branch of the anterior segment of the right lower lobe, adjacent to the segmental bronchus (Figures 1A and 1B). The patient confirmed that the CVC tip was accidentally left inside the heart after its removal, and this finding was considered as a probable cause for

hemoptysis.^(1,2) Interventional cardiology was requested; pulmonary catheterization was performed and revealed a fragment of the catheter tip with a path involving two sub-branches of the right pulmonary artery, both ends being inaccessible (Figure 1C). However, after several twisting movements, one end of the catheter was recovered to the main pulmonary artery, making it accessible and the entire fragment was recovered.

AUTHOR CONTRIBUTIONS

Both authors contributed to the writing and approval of the final version of the manuscript.

CONFLICTS OF INTEREST

None declared.

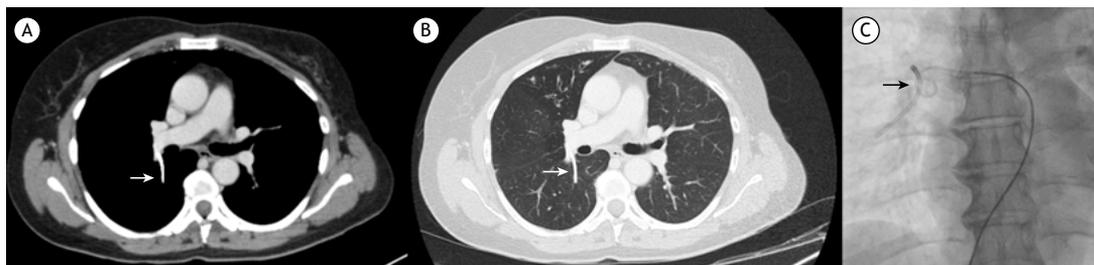


Figure 1. Axial chest CT scan for soft tissue reconstruction (in A) and with lung window settings (in B) showing a central venous catheter fragment in the pulmonary artery that was removed by pulmonary catheterization (in C).

REFERENCES

1. Cordovilla R, Bollo de Miguel E, Nuñez Ares A, Cosano Povedano FJ, Herráez Ortega I, Jiménez Merchán R. Diagnosis and Treatment of Hemoptysis. Arch Bronconeumol. 2016;52(7):368-377. <https://doi.org/10.1016/j.arbres.2015.12.002>
2. Expert Panel on Thoracic Imaging, Olsen KM, Manouchehr-Pour S, Donnelly EF, Henry TS, Berry MF, et al. ACR Appropriateness Criteria® Hemoptysis. J Am Coll Radiol. 2020;17(5S):S148-S159. <https://doi.org/10.1016/j.jacr.2020.01.043>

1. Serviço de Pneumologia, Hospital de Braga, Braga, Portugal.