

## Traumatic pulmonary pseudocyst: an unusual cause of a cavitary pulmonary nodule

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A previously healthy 34-year-old man presented to the emergency department 1 day after being involved in a motor vehicle accident. He complained of right-sided chest pain, cough, and hemoptysis. Chest CT showed a small cavitary nodule, containing an air-fluid level and surrounded by ground-glass opacities, in the right lower lobe (Figure 1A). A diagnosis of traumatic pulmonary pseudocyst (TPP) was made. The case was managed conservatively, and there were no complications. A follow-up CT scan acquired 12 days later showed that the cystic lesion had evolved to a homogeneous nodule (Figure 1B). Another CT scan acquired three months later showed a marked reduction in the volume of the lesion.

An uncommon lesion associated with traumatic chest injury, TPP occurs as a consequence of traumatic disruption of the lung parenchyma, with subsequent filling of the traumatic intraparenchymal defect with air, blood, or both. The condition is frequently associated with pulmonary contusions.<sup>(1-3)</sup> Common symptoms include chest pain, dyspnea, cough, and hemoptysis, although some patients are asymptomatic. The most common finding on CT is a round or oval cystic structure, with or without an air-fluid level. The lesion is typically surrounded by ground-glass opacities or consolidations resulting from pulmonary contusion. The management of TPP is conservative, because the clinical course is usually benign.<sup>(1-3)</sup>

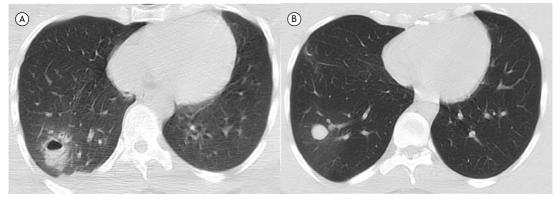


Figure 1. In A, an axial chest CT scan showing a small cavitary lesion, containing an air-fluid level and surrounded by ground-glass opacities, in the right lower lobe. A small pleural effusion is also visible. In B, a follow-up CT scan acquired 12 days later, showing that the cavitary lesion had evolved to a homogeneous nodule with hematic content, together with reabsorption of the ground-glass opacities and of the pleural effusion.

## REFERENCES

- 1. Hazer S, Orhan Söylemez UP. Clinical features, diagnosis, and treatment of traumatic pulmonary pseudocysts. Ulus Travma Acil Cerrahi Derg. 2018;24(1):49-55. https://doi.org/10.5505/tjtes.2017.56023
- 2 Tsitouridis I, Tsinoglou K, Tsandiridis C, Papastergiou C, Bintoudi A. Traumatic pulmonary pseudocysts: CT findings. J Thorac Imaging.

2007;22(3):247-251. https://doi.org/10.1097/RTI.0b013e3180413e2a

3. Phillips B, Shaw J, Turco L, McDonald D, Carey J, Balters M, et al. Traumatic pulmonary pseudocyst: An underreported entity. Injury. 2017;48(2):214-220. https://doi.org/10.1016/j.injury.2016.12.006

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