



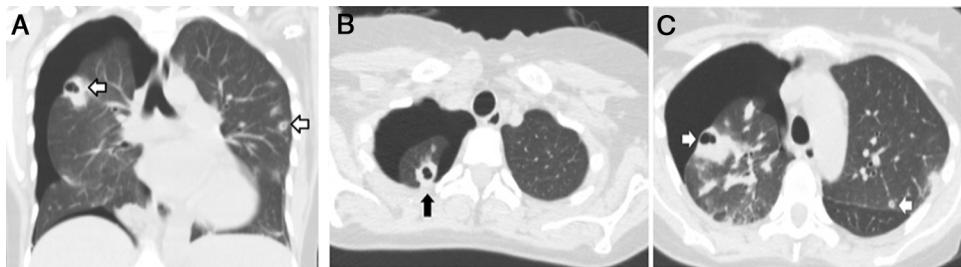
## Clinical Image

### Spontaneous Pneumothorax due to Septic Pulmonary Embolism Caused by Methicillin-resistant *Staphylococcus aureus*☆

Neumotórax espontáneo secundario a embolias sépticas pulmonares por *Staphylococcus aureus* resistente a meticilina

Horacio Matías Castro,\* Clara Lucia Torres Cabreros, Esteban Javier Wainstein

Sección de Neumonología, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina



**Fig. 1.** Chest computed tomography: (A) coronal slice; (B and C) transversal slice. Peripheral cavitary pulmonary nodules (arrows) in the right and left upper lobe and right pneumothorax.

We report the case of a 41-year-old woman with a history of kidney transplantation with chronic graft dysfunction, who was undergoing hemodialysis 3-times-weekly via temporary jugular catheter. The patient was admitted with a diagnosis of catheter sepsis with positive blood cultures for methicillin-resistant *Staphylococcus aureus*. She developed sudden dyspnea and chest pain 72 h after admission. A chest computed tomography was performed that showed right pneumothorax associated with cavitary pulmonary nodules (Fig. 1), some of which were peripheral. A diagnosis of spontaneous pneumothorax following rupture of septic cavitary emboli in the pleural space was established. The pneumothorax was treated with pleural drainage for 4 days. A 4-week course of antibiotic therapy with vancomycin was indicated, with good clinical progress.

Catheter-associated infection is a frequent cause of septic pulmonary embolism.<sup>1</sup> The causative microorganism is usually *Staphylococcus aureus*. Lesions are cavitary in 56% of cases<sup>1</sup> and, when they occur in a peripheral site, they can open to the pleural space, triggering secondary spontaneous pneumothorax.<sup>2</sup> This complication is rare and usually occurs between 5 and 15 days after starting antibiotic treatment.<sup>2</sup>

## References

- Ye R, Zhao L, Wang C, Wu X, Yan H. Clinical characteristics of septic pulmonary embolism in adults: a systematic review. *Respir Med*. 2014;108:1–8.
- Okabe M, Kasai K, Yokoo T. Pneumothorax secondary to septic pulmonary emboli in a long-term hemodialysis patient with psoas abscess. *Intern Med*. 2017;56:3243–7.

☆ Please cite this article as: Castro HM, Torres Cabreros CL, Wainstein EJ. Neumotórax espontáneo secundario a embolias sépticas pulmonares por *Staphylococcus aureus* resistente a meticilina. *Arch Bronconeumol*. 2020;56:457.

\* Corresponding author.

E-mail address: [matiascas85@gmail.com](mailto:matiascas85@gmail.com) (H.M. Castro).