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Clinical Image

[Translated article] Endoscopic Treatment of Bronchopericardial Fistula in Lung Cancer Patient

Tratamiento endoscópico de fístula broncopericárdica en paciente con cáncer de pulmón

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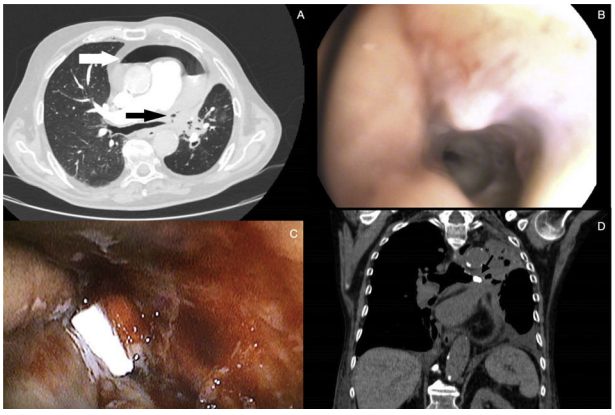

Fig. 1. (A) Axial CT scan of the chest showing the path of the bronchopericardial fistula (black arrow) and pneumopericardium (white arrow). (B) Endoscopic image showing the fistula trajectory. (C) Endoscopic view where Watanabe spigot can be seen at the beginning of the fistula trajectory. (D) Coronal CT slice after 48 h showing correct positioning of the spigot (arrow).

Our patient was a 71-year-old man, former smoker with a cumulative smoking index of 80 pack-years, diagnosed with T4N2M1 squamous cell carcinoma of the lung 2 years previously, receiving chemotherapy and radiation therapy. He attended the emergency room with a 48-h history of asthenia, and hypotension was detected. Computed tomography showed tension pneumopericardium (Fig. 1A) and bronchoscopy revealed a fistula orifice of about 5 mm in the distal third of the left main bronchus which was constricted by the tumor (Fig. 1B). We decided to close the fistula by implanting a 6 mm Watanabe spigot to occlude the fistula orifice and surround it with Bioglue® biological sealant (Fig. 1C). A follow-up computed tomography scan was performed at 48 h, and the spigot was seen to be in the correct position (Fig. 1D). The patient progressed well, but despite this, he died a week later due to massive hemoptysis. Bronchopericardial fistula causing pneumopericardium is a rare and often lethal complication of lung carcinoma. Surgical treatment of bronchopericardial fistula is often unsuccessful due to anatomical limitations and intra-operative hemodynamic instability. Endoscopic management has rarely been used. We found no literature describing the implantation of a spigot in this indication, and very few other alternative treatment options are available.[1,2]

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Conflict of interests

The authors state that they have no conflict of interests.

References

1. Lages J, Oliveira CC, Lacerda C. Pneumopericardium due to brochopericardial fistula in a patient with lung cancer. BMJ Case Rep. 2018, http://dx.doi.org/10.1136/bcr-2018-226939.
2. Gharwan H, Erlich R, Skaryak L. Non-small-cell lung cancer with brochopericardial fistula formation. J Clin Oncol. 2011;29:141–2, http://dx.doi.org/10.1200/JCO.2010.31.9483.

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