

Ground-glass Opacity Associated With Endobronchial Leech



Opacidad de vidrio esmerilado asociada a una sanguijuela endobronquial

Dear Editor:

We report the case of a 49-year-old woman, who presented with a 6-week history of cough, rusty brown sputum with hemoptysis and hoarseness. She was a farmer and had a history of drinking field unboiled water. A computed tomographic scan of the chest showed a ground-glass opacity (GGO) in the medial basal segment of the right lower lobe, measuring 22 mm in its largest diameter (Fig. 1A). Laboratory investigations demonstrated a white-cell count of 5280 per mm^3 (reference range, 4000•10,000), an absolute eosinophil count of 600 per mm^3 (reference range, 50•500), hemoglobin level of 147.00 g/L (reference range, 110•160), and C-reactive protein levels of 11.30 ml/L (reference range, 0 068•8.2). The blood coagulation tests were normal. The differential diagnosis included lung cancer, eosinophilic lung disease and focal pneumonia. Bronchoscopy was performed, and revealed a brown worm-like moving foreign body almost completely obstructing the lumen of the medial basal segmental bronchus of the right lower lobe (Fig. 1B). The foreign body was removed from the bronchus by cryoadhesion with a cryotherapy probe passed through the channel

of a flexible bronchoscope with resolution of the obstruction and was identified as a 4 cm long living leech (Fig. 1C). After removal of the leech, the patient was discharged from the hospital without any discomfort and complaint. Follow-up computed tomographic of the chest at 1 week showed the ground-glass opacity in the right lower lobe was almost completely resorbed (Fig. 1D).

Leeches are parasites that live in quiet pools and streams. Leeches are the very rare cause of airway foreign body around the world.^{1•3} Leeches are hemophagic parasites, living on occasional meals of blood obtained by attaching to fish, amphibians, and mammals. They can enter the human body when people drink infested water from quiet streams, pools and springs. Although there are several case reports about leech in the airway, these leeches locate in the larynx or trachea.^{1•3} Interestingly, the leech of our case was in the bronchus, and the chest CT showed a GGO. To the best of our knowledge, this is the first report of endobronchial leech showing a GGO on CT scan. The nature of this GGO induced by the parasite was unclear. We speculated that the cause might relate to blood tracking back into the parenchyma or an inflammatory response to the leech or its secretions. The differential diagnosis of GGO induced by endobronchial leech included lung cancer, eosinophilic lung disease and focal pneumonia.

Although extremely rarely seen, endobronchial leech infestation should be kept in mind especially in patients presenting with unexplained haemoptysis, hoarseness and elevated eosinophils and a history of drinking infested water from streams, pools and springs.

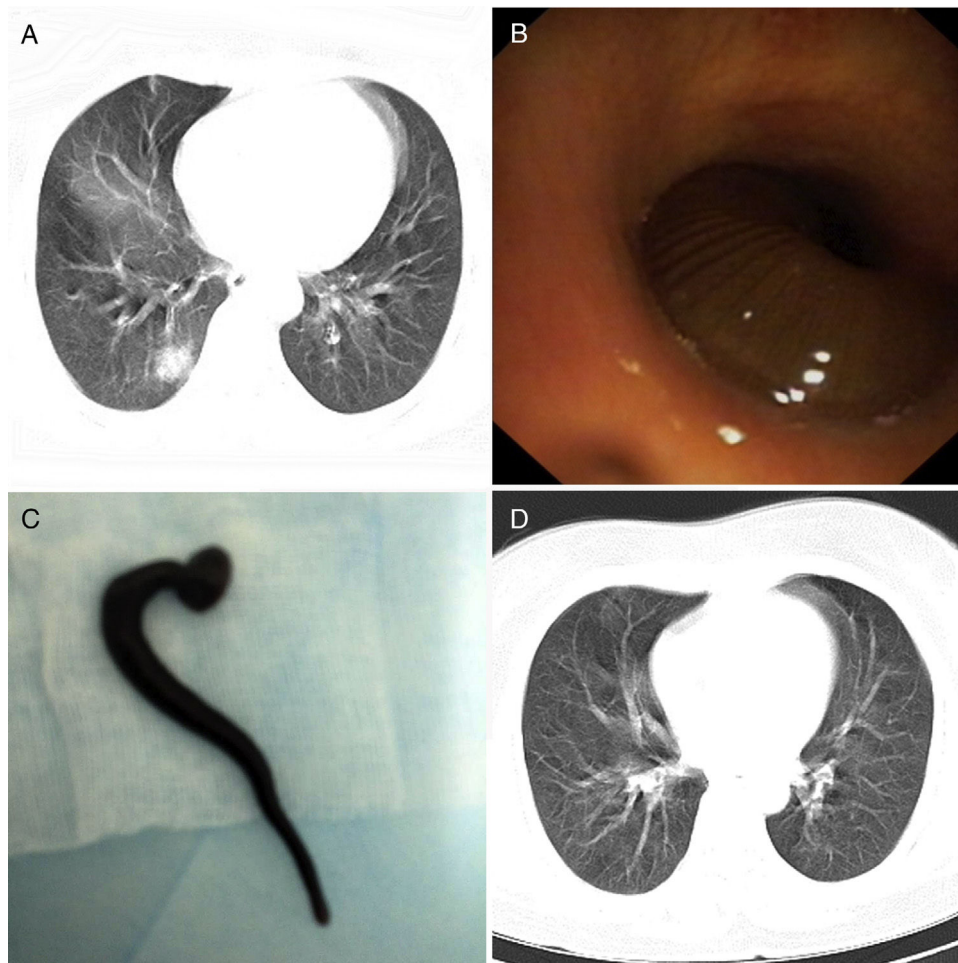


Figure 1. Chest computed tomography showed a ground-glass opacity in the medial basal segment of the right lower lobe (A). Bronchoscopy revealed a brown worm-like moving foreign body almost completely obstructing the lumen of the medial basal segmental bronchus of the right lower lobe (B). The foreign body was identified as a 4 cm long living leech (C). Chest computed tomography after 1 week showed the ground-glass opacity in the right lower lobe was almost completely absorbed (D).

Funding

This work was supported by the “Special and Joint Program” of Yunnan Provincial Science and Technology Department and Kunming Medical University (No. 2014FA018), Science and Technology Program for Public Wellbeing of Yunnan Province (No. 2014RA020), and Young academic and technical leaders of Yunnan Province (No. 2017HB053).

References

1. Draiss G, Razzouki K, Mouaffak Y, Bouskraoui M, Younous S. Upper airway obstruction and hemoptysis due to a leech infestation in a child. *Arch Pediatr.* 2016;23:94–6.
2. Zhang P, Zhang R, Zou J, Zhu T. A rare case report of tracheal leech infestation in a 40-year-old woman. *Int J Clin Exp Med.* 2014;7:3599–601.
3. Ali SR, Mehta AC. Alive in the airways live endobronchial foreign bodies. *Chest.* 2017;151:481–91.

Zhong-Chuan Yang,^a Jiao Yang,^b Xu-Wei Wu,^c Xi-Qian Xing^{c,*}

^a Department of Respiratory Medicine, The Sixtieth Central Hospital of Chinese People's Liberation Army, Dali, China

^b First Department of Respiratory Medicine, First Affiliated Hospital of Kunming Medical University, Kunming, Yunnan, China

^c First Department of Respiratory Medicine, Yan'tm)An Hospital Affiliated to Kunming Medical University, China

* Corresponding author.

E-mail address: xingxiqianmd@yahoo.com (X.-Q. Xing).

1579-2129/

© 2017 SEPAR. Published by Elsevier España, S.L.U. All rights reserved.

Recurrent Chylothorax Due To Secondary Superior Vena Cava Obstruction[☆]



Quilotórax recidivante por obstrucción de la vena cava secundaria superior

To the Editor,

Chylothorax is the accumulation of chyle in the pleural cavity caused by damage to the thoracic duct or any of its branches.¹ It contains a high concentration of triglycerides in the form of chylomicrons, giving chyle its milky appearance.¹ The definitive diagnosis is based on the characteristic finding of chylomicrons or triglyceride levels greater than 110 mg/dl.¹ It is divided into

2 groups: traumatic (both iatrogenic and non-iatrogenic), and non-traumatic (malignant, miscellaneous or idiopathic).¹ In the case of non-traumatic chylothorax, treatment of the underlying disease is indicated, and unless the etiology is malignant, a long-chain triglyceride-free diet is recommended.² In traumatic chylothorax, initial treatment should be conservative, although early surgery is recommended if the volume is very large.¹

We report the case of a patient who presented recurrent right chylothorax due to vena cava obstruction, caused by occlusion of a subcutaneous venous reservoir inserted for previous chemotherapy (CT). The patient was treated surgically by opening the right vena cava, resecting the fibrosis, and using a heterologous bovine pericardium patch for repair, with a good outcome.

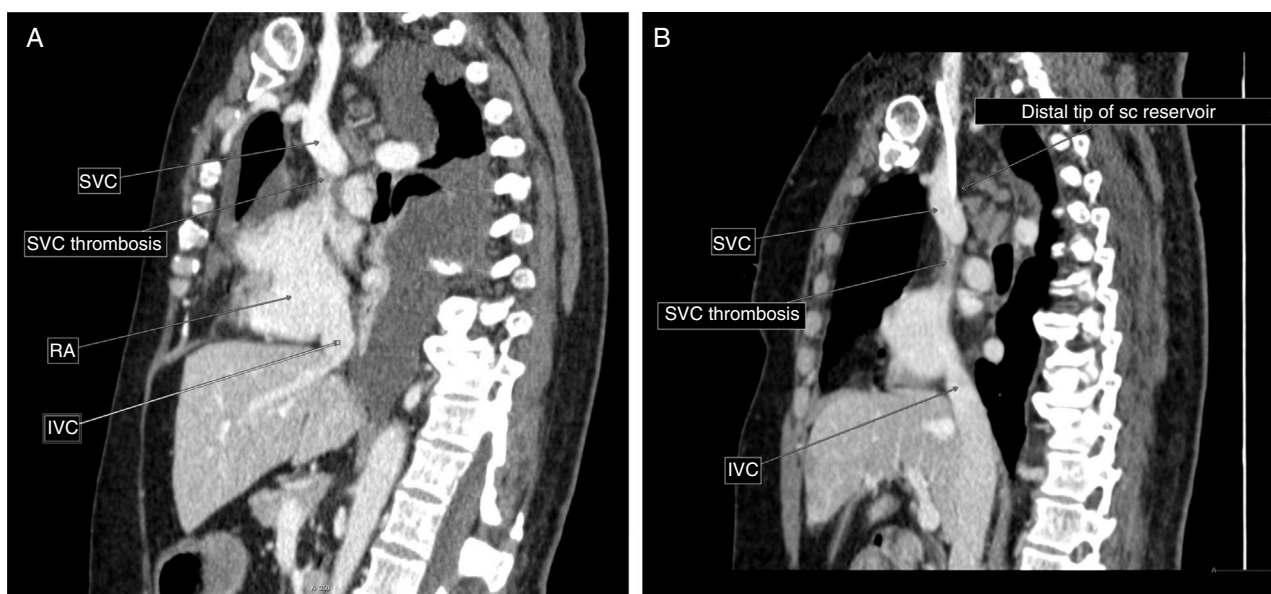


Fig. 1. (A) Computed tomography with intravenous contrast in the venous phase. Sagittal slice. A superior vena cava filling defect is visualized proximal to the mouth of the arch of the azygos vein, extending to the entry into right atrium, consistent with at least partial thrombosis of the structure, and associated with significant effusion. (B) Sagittal slice. Distal tip of the subcutaneous reservoir in relation to the subcutaneous vena cava thrombosis. IVC: inferior vena cava; RA: right atrium; sc: subcutaneous; SVC: superior vena cava.

[☆] Please cite this article as: Cerezo Lajas A, Martín Pinacho JJ, Frías Benzant I, de Miguel-Díez J. Quilotórax recidivante por obstrucción de la vena cava secundaria superior. *Arch Bronconeumol.* 2018;54:434–435.