

No pathological endobronchial findings were observed on flexible bronchoscopy. Aspirates were obtained from the G7 region, and the cytological examination of these samples provided a diagnosis of small-cell anaplastic bronchogenic carcinoma. The patient was referred to the oncology department for treatment.

The association of paraneoplastic syndromes (PSs) with malignant tumors is well known, and any body organ or tissue can be affected. PS occurs in approximately 10% of the patients with lung malignancies, and is more common in small-cell carcinoma.¹ Although most of the neurological complications of lung cancer are due to metastases, there are several neurological PSs, one of the most common being polyneuropathy. Clinical features of paraneoplastic polyneuropathy include the subacute development of asymmetric sensorial changes, such as pain, paresthesia and numbness affecting the distal extremities.² Polyneuropathy can appear more than 1 year before the diagnosis of cancer, as occurred in our case.

In an adult with peripheral polyneuropathies and a long-term history of smoking, seropositivity for anti-neuronal nuclear autoantibodies type-1 (ANNA-1), also known as anti-Hu, is a marker for small-cell lung cancer.³ The pathogenic mechanism of these antibodies is probably due to these antibodies accumulating in the neurons of the nervous system. These antibodies can be detected in small-cell carcinoma patients without neurological symptoms, but not in healthy subjects.⁴ Management of this syndrome includes treatment of the underlying cancer, but this does not generally help the neurological symptoms, which tend to progress rapidly.⁵

References

1. Porto L, Miranda M, Gomes A, André R, Rodrigues B. Paraneoplastic neurological syndrome as an initial indicator of small cell carcinoma of the lung. *BMJ Case Rep.* 2013;2013.
2. Senties-Madrid H, Vega-Boada F. Paraneoplastic syndromes associated with anti-Hu antibodies. *Isr Med Assoc J.* 2001;3:94–103.
3. Roberts WK, Deluca JJ, Thomas A, Fak J, Williams T, Buckley N, et al. Patients with lung cancer and paraneoplastic Hu syndrome harbor HUD-specific type 2 CD8+ T cells. *J Clin Invest.* 2009;119:2042–51.
4. Leroy T, Porte H, Rousselot C, Taieb S, Outteryck O, Dansin E. Anti-Hu antibody syndrome: diagnostic and therapeutic difficulties. *Rev Mal Respir.* 2013;30:563–6.
5. Graus F, Vega F, Delattre JY, Bonaventura I, René R, Arbaiza D, et al. Plasmapheresis and antineoplastic treatment in CNS paraneoplastic syndromes with antineuronal autoantibodies. *Neurology.* 1992;42:536–40.

María del Mar Valenzuela Membrives,^{a,*} María Sánchez Palop,^a Javier Esquivias López^b

^a *Unidad de Gestión Clínica de Neumología, Hospital Universitario San Cecilio, Granada, Spain*

^b *Servicio de Anatomía Patológica, Hospital Universitario Virgen de las Nieves, Granada, Spain*

* Corresponding author.

E-mail address: marivalen8@hotmail.com

(M.M. Valenzuela Membrives).

Intraluminal Lesion of the Pulmonary Artery: A Diagnostic Challenge[☆]



Lesión intraluminal en la arteria pulmonar: un reto diagnóstico

To the Editor,

Intravascular space-occupying lesions of the pulmonary artery are uncommon and diagnosis can be delayed due to non-specific accompanying clinical data.¹ Primary tumors originating in systemic blood vessels are very rare, and even rarer in the pulmonary artery. We report the first case described in the literature of small-cell lung cancer metastasis in the trunk of the pulmonary artery.

A 68-year-old woman presented with a history of colon and thyroid cancer, and *in situ* epiglottal carcinoma. In June 2011, fiberoptic bronchoscopy returned a diagnosis of small-cell lung cancer in the anterior segment of the left upper lobe (LUL), for which she received 6 cycles of CDDP-VP-16, and chest and whole-brain radiation therapy (RT). Treatment was completed in November 2011. On radiological studies, a space-occupying lesion was seen in the left pulmonary artery, suggestive of an intramural thrombus (Fig. 1), so anticoagulant treatment was administered for 1 year.

Follow-up radiological studies showed progression of the intrarterial lesion, suggesting that it might be a tumor. As it was impossible to obtain a sample for histology from this site, surgery was undertaken for the purposes of diagnosis and treatment. Left intrapericardial pneumonectomy with arterial section extending to the disease-free zone was performed. Pathology results confirmed small-cell lung cancer with disease-free surgical margins. No intrathoracic complications occurred during the post-operative period. The patient is currently being followed up by the medi-

cal oncologist and has shown no signs of recurrence of her lung disease.

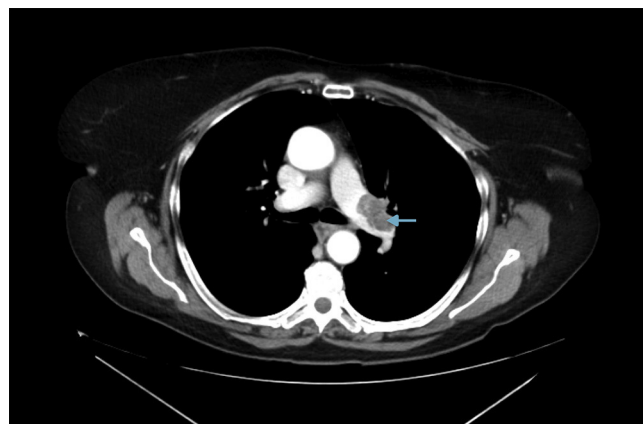


Fig. 1. Left pulmonary artery filling defect.

Malignant tumors within the pulmonary artery may be rare, but they must be considered in the differential diagnosis of pulmonary embolism; in half the cases, diagnosis is made *postmortem*,² but advances in diagnostic imaging techniques mean that more cases are being detected. Shepard et al. published 4 cases of intravascular tumor in the pulmonary artery detected in 14,000 consecutive chest CTs, and concluded that the images of the peripheral branches of dilated pulmonary arteries could be highly suggestive of tumor emboli.³ In a review of 1085 autopsies of patients with a known diagnosis of solid malignant tumors, metastases causing intraarterial obstruction were found to occur in cancers with access to large veins, such as hepatocarcinomas, choriocarcinomas and renal cell carcinomas.⁴

[☆] Please cite this article as: Laguna Sanjuanelo S, Zabaleta J, Aguinagalde B. Lesión intraluminal en la arteria pulmonar: un reto diagnóstico. *Arch Bronconeumol.* 2015;51:253–254.

In our case, a primary lesion was suspected due to the slow progress observed in radiological monitoring and the possibility of tumor relapse was ruled out in view of the stability of the LUL lesion.

The intrapericardial site of the lesion posed problems, including a high risk of bleeding during histological sampling. For this reason, a surgical approach was taken, and an intrapericardial pneumonectomy was performed, in view of the tumor location. Decision-making in this case was a tangible diagnostic and therapeutic challenge.

References

1. Parish JM, Rosenow EC 3rd, Swensen SJ, Crotty TB. Pulmonary artery sarcoma. Clinical features. *Chest*. 1996;110:1480–8.
2. Seo JB, Im JG, Goo JM, Chung MJ, Kim MY. Atypical pulmonary metastases: spectrum of radiologic findings. *Radiographics*. 2001;21:403–17.

3. Shepard JA, Moore EH, Templeton PA, McLoud TC. Pulmonary intravascular tumor emboli: dilated and beaded peripheral pulmonary arteries at CT. *Radiology*. 1993;187:797–801.
4. Okano Y, Satoh T, Tatewaki T, Kunieda T, Fukuyama S, Miyazaki N, et al. Pulmonary artery sarcoma diagnosed using intravascular ultrasound images. *Thorax*. 1999;54:748–9.

Stephny Laguna Sanjuanelo,* Jon Zabaleta, Borja Aguinagalde

Servicio de Cirugía Torácica, Hospital Universitario Donostia, San Sebastián, Guipúzcoa, Spain

* Corresponding author.

E-mail addresses: laguna_stephy@hotmail.com,
Stephanymelina.lagunasanjuanelo@osakidetza.net
(S. Laguna Sanjuanelo).

Empyema due to *Aggregatibacter aphrophilus* and *Parvimonas micra* Coinfection*



Empiema secundario a coinfección por *Aggregatibacter aphrophilus* y *Parvimonas micra*

Aggregatibacter aphrophilus, formerly known as *Haemophilus aphrophilus*, is a facultative anaerobic Gram-negative coccobacillus that forms part of the oropharyngeal flora. Although it is not highly pathogenic, it has been associated with infections, such as endocarditis, cerebral abscesses, bone and joint infections, and endophthalmitis.^{1,2} Pleuropulmonary involvement, however, remains exceptional.³ Another common commensal of the oropharyngeal cavity is *Parvimonas micra*, formerly *Peptostreptococcus micros*, a strictly anaerobic Gram-positive coccus that has been

associated with polymicrobial infections (intracranial abscesses, paranasal sinus infections, periodontitis and septic embolism^{4,5}). Reports of *P. micra* as a pathogen in lung infections are exceedingly rare. We report the first case of pleural empyema due to *A. aphrophilus* and *P. micra* coinfection.

A 49-year-old man was admitted with a 4-day history of dyspnea, cough with purulent expectoration and fever. In the previous 3 months, he had suffered asthenia and anorexia and had lost 12 kg in weight. He was a habitual smoker (1 pack-year) and his alcohol intake was 80 g ethanol/day. He had no other comorbidities. On physical examination, temperature was 37.4 °C, hypoventilation in the lower half of the right hemithorax on lung auscultation, and poor oral hygiene, with extensive caries and evidence of periodontitis. Clinical laboratory results revealed a white blood cell

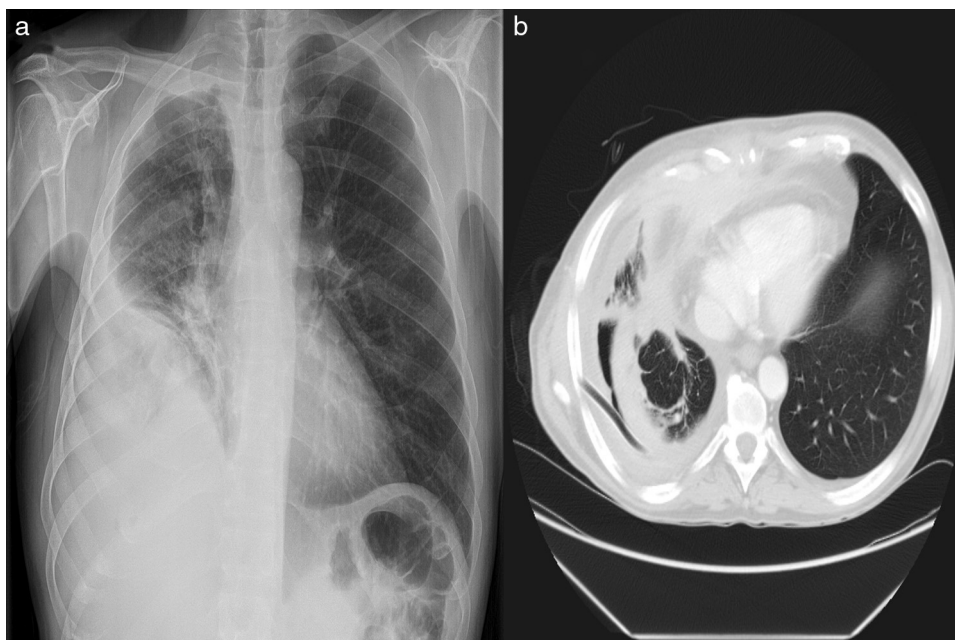


Fig. 1. (a) Upper and lower right lobe infiltrates and pleural effusion; (b) right lower lobe atelectasis with pleural effusion.

* Please cite this article as: Rodríguez-Segade S, Velasco D, Marcos PJ. Empiema secundario a coinfección por *Aggregatibacter aphrophilus* y *Parvimonas micra*. *Arch Bronconeumol*. 2015;51:254–255.