Solitary pulmonary nodule due to pulmonary arteriovenous malformation

Eleftheria Haini[1],
Ilias Papanikolaou[1],
Eleni Perouli[2],
Theano Dimitriou[2],
Konstantinos Pagratis[1]

[1]Pulmonary Dpt.,
[2]Radiology Dpt.,
Corfu General Hospital

Key words:
- Solitary lung nodule
- Solitary pulmonary arteriovenous malformation

A female patient, 48 years old, non smoker, with unremarkable personal history admitted to our hospital due to dysuria. The patient presented no respiratory symptoms. There where no mucosal or skin telangiectasias or other abnormal physical findings. SpO_2 was 98% in room air. The laboratory tests were compatible to urinary tract infection. The **Chest x-ray** (Figure 1) showed a round, non-calcified nodule on the right middle lobe, connected with the right hilum by a linear shadow. It represents a "typical" radiological picture of a solitary pulmonary arteriovenous malformation (PAVM)[1]. **Chest CT scan** (Figure 2) showed a nodule of 1.8 cm diameter with contrast enhancement, connecting to blood vessels, a picture compatible to a solitary pulmonary arteriovenous malformation. The patient was referred to an Interventional Radiology center for further management (embolization assessment). PAVM is a rare abnormality of pulmonary vasculature and in most cases it correlates to Hereditary Hemorrhagic Telangiectasia syndrome. It is characterized by direct communication of a pulmonary artery branche to a pulmonary vein, without the presence of a capillary network[1].

REFERENCES

1. Gossage JR, Kanj G. Pulmonary Arteriovenous Malformations. A State of the Art Review. Am J Respir Crit Care Med 1998; 158:643–61.

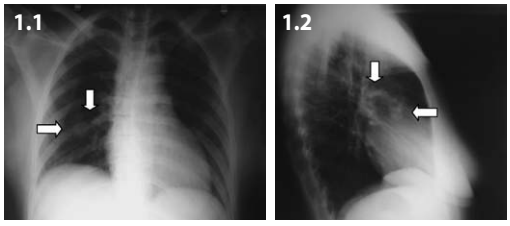

FIGURE 1. Chest X-ray (1.1 Posteroanterior, 1.2 Lateral). A round, well circumscribed, non-calcified nodule of homogenous density, is shown on the right middle lobe (horizontal arrows). A linear shadow connects the nodule to the right hilum (vertical arrows). The nodule represents the aneurysmal sac and the linear shadow the feeding artery.

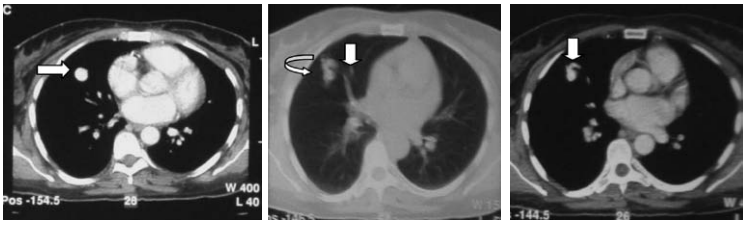

FIGURE 2. Chest CT scan with contrast medium. A round, homogenous, well circumscribed, non calcified nodule of 1.8 cm diameter with contrast enhancement is shown on the right middle lobe (horizontal arrow). This nodule represents the aneurysmal sac which communicates with a plexus of dilated vessels (curved arrow). The feeding artery and draining vein can also be seen (vertical arrows).

Correspondence to:
Eleftheria Haini
Chest Physician, Pulmonary Dpt, Corfu General Hospital
e-mail: elhaini@otenet.gr