



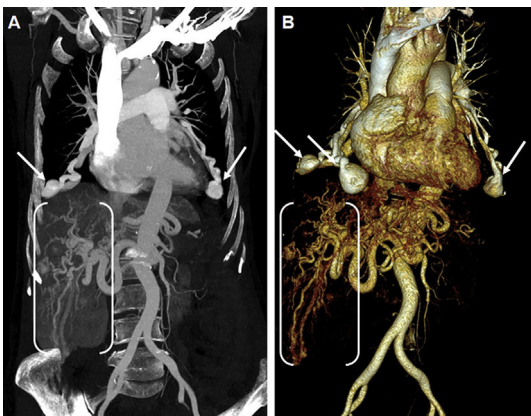
Clinical Image

Multiple Pulmonary and Hepatic Arteriovenous Malformations in a Patient With Rendu-Osler-Weber Disease

Malformaciones arteriovenosas pulmonares y hepáticas múltiples en un paciente con enfermedad de Rendu-Osler-Weber

Emine Izgi, Fadime Guven, Hayri Ogul\*

Department of Radiology, Faculty of Medicine, Ataturk University, Erzurum, Turkey



**Fig. 1.** Coronal MIP image (A) and anterior view volume rendering 3D (B) thoracoabdominal CT angiographies showing multiple pulmonary (arrows) and hepatic arteriovenous malformations (between brackets).

A 63-year-old female presented with shortness of breath. Thoracoabdominal computed tomography (CT) angiography demonstrated multiple pulmonary and hepatic arteriovenous malformations (Fig. 1). Rendu-Osler-Weber disease is characterized by multiple mucocutaneous telangiectasias and visceral arteriovenous malformations.

Osler-Weber-Rendu is an autosomal dominant disease. It is characterized by multiple mucocutaneous telangiectasias, recurrent epistaxis, and visceral arteriovenous malformations. Vascular structures of the lung and gastrointestinal tract frequently involve.<sup>1</sup> With the advent of multidetector CT, hepatic and pulmonary involvement with Rendu-Osler-Weber is commonly recognized.<sup>1</sup>

In liver involvement of Rendu-Osler-Weber disease, there is shunting from the hepatic artery to the portal or hepatic veins.<sup>2</sup> These vascular anastomoses can be diagnosed by CT or catheter angiography. Transcatheter embolization of hepatic or pulmonary arteries can be performed in lung or liver involvement of patients with Rendu-Osler-Weber disease. Transplantation can be performed in patients with liver or pulmonary insufficiency.<sup>3</sup>

References

- Ogul H, Aydin Y, Ozgokce M, Orsal E, Kantarci M, Eroglu A. Pulmonary arteriovenous malformations and hepatic involvement in a patient with Osler-Rendu-Weber disease. *Ann Thorac Surg.* 2012;94:e155.
- Garcia-Tsao G, Korzenik JR, Young L, Henderson KJ, Jain D, Byrd B, et al. Liver disease in patients with hereditary hemorrhagic telangiectasia. *N Engl J Med.* 2000;343:931-6.
- Lacombe P, Lacout A, Marcy PY, Binsse S, Sellier J, Bensalah M, et al. Diagnosis and treatment of pulmonary arteriovenous malformations in hereditary hemorrhagic telangiectasia: an overview. *Diagn Interv Imaging.* 2013;94:835-48.

\* Corresponding author.  
E-mail address: drhogul@gmail.com (H. Ogul).