

( - - )  
: 2 1

가 , 가  
CT  
가 CT

(78%), (44%), (31%), (20%), (8%), (Fig. 1). CT  
(1).

100,000 ( 175cm/

(2). ) 가

CT 3 (3). MRI

MRI (2). 가 가

2  
65 CT

1  
46 가

4.20 × 10<sup>6</sup>/μℓ, 5.5g/dℓ (microcytic hypochromatic) MRI (Fig. 2).  
가

가 가

가 20% Remy (4), CT  
 , 90% 가 3 ( )  
 가 ) 2 5mm, 1, 360°  
 ) 100% (3).  
 가 (1, 2).  
 (2).  
 153 ±  
 65.2cm/ ( 64.9 ± 11.4cm/ )  
 가 (5). 가 (5),  
 (2). CT  
 (6). CT 60% (2).  
 CT 98% 가 (signal void)

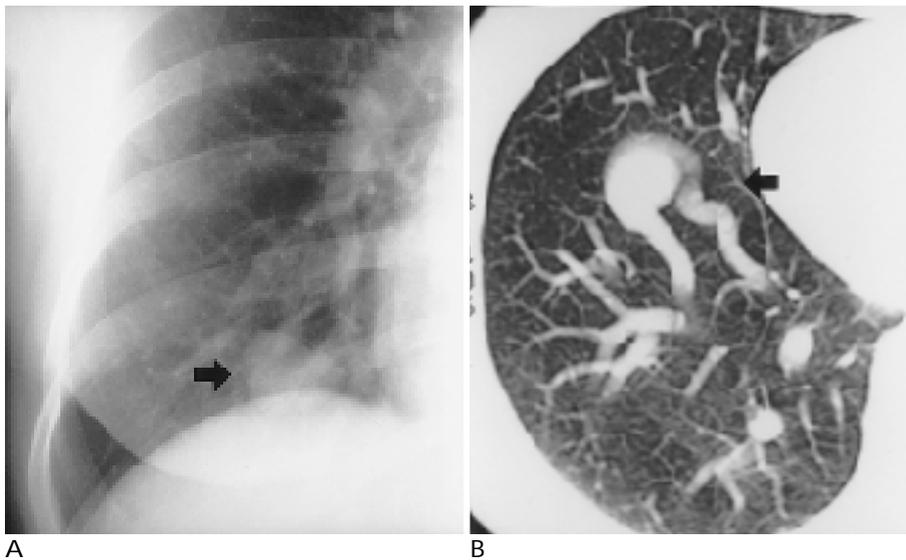


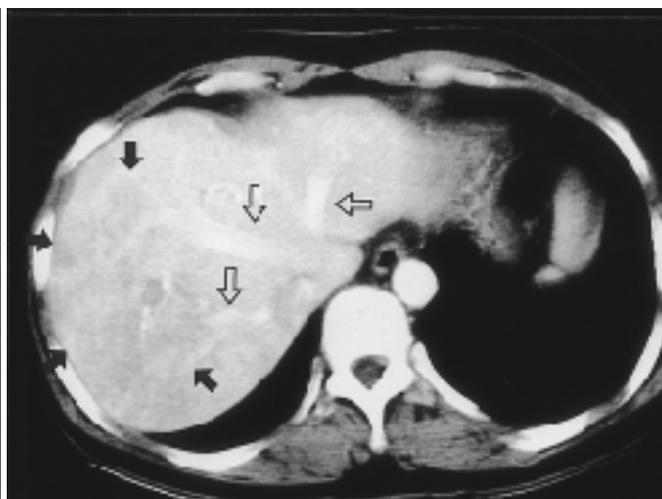
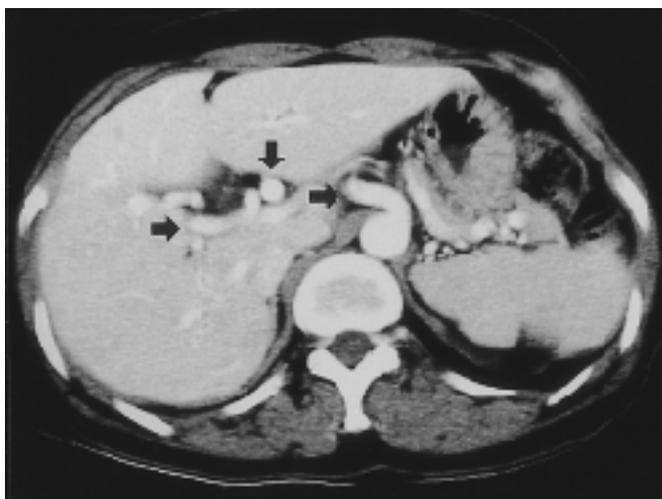
Fig. 1. 46-year-old woman with Osler-Weber-Rendu disease.

A. Chest radiograph shows well-defined mass in right lower lobe of lung (arrow).

B. CT scan of lung window setting at the level of the cardiac ventricle shows pulmonary arteriovenous malformation (arrow) with feeding artery and draining vein in right lower lobe.

C. CT scan of liver at arterial phase shows enlarged and tortuous hepatic artery (arrows).

D. CT scan of liver at arterial phase shows low density in liver parenchyma due to shunting (arrows) and early visualization of hepatic veins (empty arrows).



C

D



## **Imaging Findings of Arteriovenous Malformations Involving Lung and Liver in Hereditary Hemorrhagic Telangiectasia (Osler-Weber-Rendu Disease) : Two Cases Report<sup>1</sup>**

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Hereditary hemorrhagic telangiectasia (HHT) or Osler-Weber-Rendu disease is an autosomal dominant disorder characterized by repeated episodes of bleeding. Multiple telangiectases consisting of thin-walled, dilated vascular channels with arteriovenous communication may involve, for example, mucocutaneous tissue, the gastrointestinal tract, and the liver, lung, and brain. We report the imaging findings of two cases of HHT involving arteriovenous malformation of both the lungs and liver, a rare condition. Chest radiography revealed a round mass, while helical CT showed a feeding artery and draining vein with arteriovenous malformation in the lung. Color Doppler sonography revealed an enlarged and tortuous hepatic artery with high systolic velocity. CT demonstrated an enlarged hepatic artery, arteriovenous shunt, and early draining hepatic vein in the liver. Celiac angiography showed arteriovenous malformation.

**Index words** : Arteriovenous malformations, hepatic  
Arteriovenous malformations, pulmonary  
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