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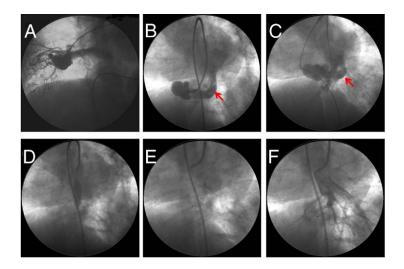


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## Late Onset of Hypoxemia Due to a Pulmonary Arteriovenous Malformation During Selective Estrogen Receptor Modulator Therapy

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From the Department of Clinical Medicine, Cardiovascular and Immunological Sciences, Federico II University, Naples, Italy. Manuscript received August 12, 2009; accepted August 28, 2009. 76-year-old woman with unexplained hypoxemia and severe exertional dyspnea was admitted to our department. The symptoms had appeared during tamoxifen therapy after resection of breast carcinoma; history revealed recurrent upper gastrointestinal bleeding, epistaxis, and a granddaughter deceased because of a cerebral arteriovenous malformation. Chest computed tomography scan showed the presence of a highly vascularized nodule in the right lower lobe.

Right pulmonary artery angiography demonstrated a large pulmonary arteriovenous malformation (PAVM) (Online Video 1) with massive right-to-left shunt (A, B, C; Online Video 2); this confirmed the diagnosis of hereditary hemorrhagic telangiectasia (1). The **arrows** point to the right upper pulmonary vein.

We decided to percutaneously close the PAVM. An occlusion test was performed before the procedure (**D**);  $O_2$  saturation rose from 87% to 96%. The PAVM was subsequently closed using a vascular occlusion device (**E**) with complete abolishment of the right-to-left shunt (**F**; Online Video 3). It is likely that selective estrogen receptor modulator therapy may have been responsible for the enlargement of the PAVM in our patient (2).

### REFERENCES

- Haitjema T, Westermann CJ, Overtoom TC, et al. Hereditary hemorrhagic telangiectasia (Osler-Weber-Rendu disease). New insights in pathogenesis, complications, and treatment. Arch Intern Med 1996;156: 714–9.
- Battista MJ, Eichbaum MH, Hosch WP, et al. Extensive Osler-Rendu disease in a breast cancer patient: increasing hepatic arteriovenous malformations under endocrine therapy mimicking liver metastases. Onkologie 2008;31:328-31.

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