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IMAGES IN CARDIOLOGY

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

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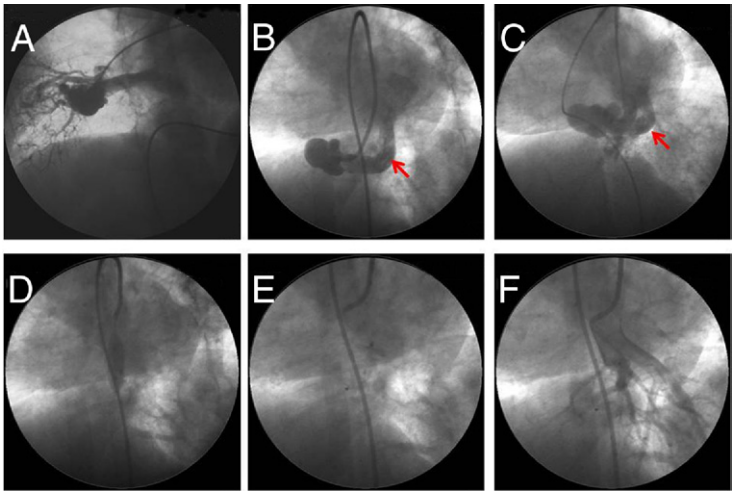

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A 76-year-old woman with unexplained hypoxemia and severe exertional dyspnea was admitted to our department. The symptoms had appeared during tamoxifen therapy after resection of breast carcinoma; history revealed recurrent upper gastrointestinal bleeding, 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).

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