

Letters to the Editor

Enormous Arteriovenous Fistula as a Rare Cause of Heart Failure***Gran fístula arteriovenosa como causa poco común de insuficiencia cardíaca*****To the Editor,**

A 65-year-old woman visited our clinic with a complaint of lower limb edema. A chest X-ray revealed pleural effusion, and echocardiography showed normal left ventricular function, but right heart enlargement and pulmonary hypertension were present, and estimated pulmonary artery pressure was 70 mmHg. Investigation of the cause of the pulmonary hypertension and heart failure revealed left lower leg pigmentation and swelling.

Gated time-of-flight angiography was performed because of auscultation of a vascular bruit, and the results showed marked dilatation down to the popliteal artery, with left lower limb arteries maintained at the same diameter as the abdominal aorta (Fig. 1A). Contrast-enhanced computed tomography showed prominent arteriovenous dilatation and a complex arteriovenous fistula and mass formation below the knee (Fig. 1B and 1C). The patient had a history of surgery for osteomyelitis of the left lower leg 50 years previously. The possible presence of an iatrogenic arteriovenous fistula was considered the probable cause of both the marked dilatation of the arteries and veins, and of the mass formation. Right cardiac catheterization revealed a cardiac output of 7 L/min. With the application of a left thigh tourniquet the cardiac output decreased to 4 L/min. Coil embolization was considered impossible because selective arteriography showed a large and complex arteriovenous fistula.^{1,2} Since the patient

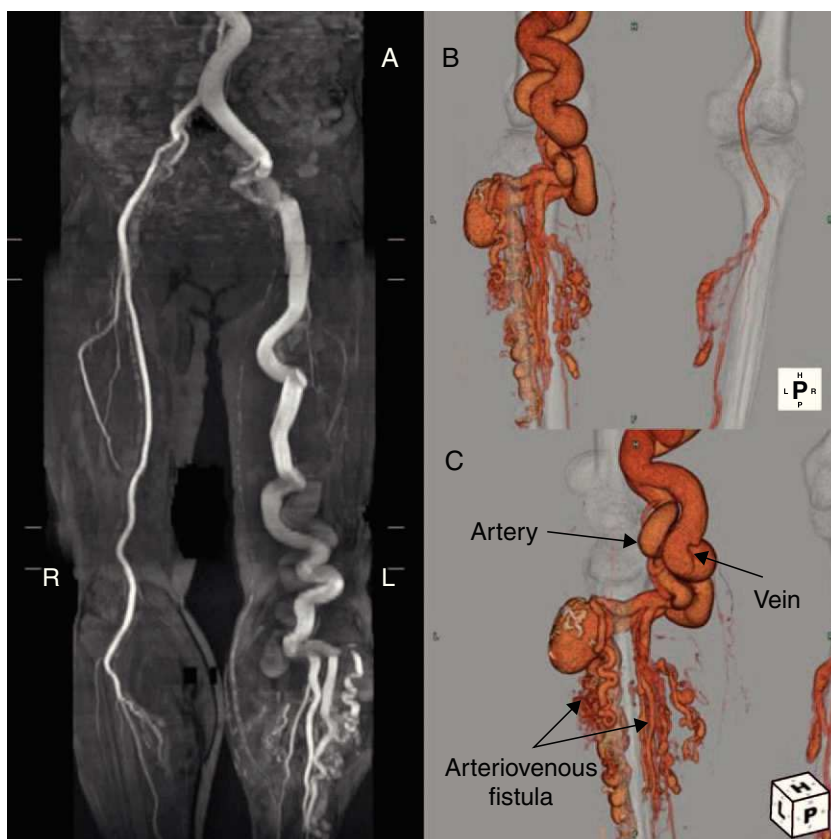


Figure 1. A: Marked dilatation of the left lower limb arteries maintained at the same diameter as the abdominal aorta. B and C: Prominent arteriovenous dilatation and a complex arteriovenous fistula and mass formation below the knee.

refused amputation,^{3,4} we selected drug therapy and monitored the course. Cases of long-term neglect of an acquired arteriovenous fistula resulting in prominent arteriovenous dilatation and mass formation are very rare.

Soichiro Ichikawa* and Shigeru Fukuzawa

Division of Cardiology, Funabashi Municipal Medical Center Heart and Vascular Institute Funabashi, Funabashi, Japan

*Corresponding author:

E-mail address: so_ichi75@yahoo.co.jp (S. Ichikawa).

Available online 4 March 2011

REFERENCES

1. Peynircioglu B, Ozkan M, Dogan OF, Cil BE, Dogan R. Transvenous embolization of a spontaneous femoral AVF 5 years after an incomplete treatment with arterial stent-grafts. *Cardiovasc Intervent Radiol*. 2008;31:407–10.
2. Wang MQ, Xie CM, Wang ZP, Guan J, Gu XF, Liu FY. Treatment of acquired arteriovenous fistulas with interventional minimally invasive techniques. *Zhonghua Wai Ke Za Zhi*. 2004;42:687–91.
3. Ilijevski NS, Nenezic DD, Sagic D, Radak D. Popliteal traumatic arteriovenous fistula. *Vascular*. 2005;13:309–12.
4. Ilijevski N, Radak D, Radevic B, Sagic D, Kronja G, Misovic S, et al. Popliteal traumatic arteriovenous fistulas. *J Trauma*. 2002;52:739–44.

doi:10.1016/j.rec.2010.12.004

Transesophageal Echocardiography in Congenital Aortic Valvulopathy

La ecocardiografía transesofágica en la valvulopatía aórtica congénita

To the Editor,

Although new imaging techniques, such as computed tomography and magnetic resonance imaging, can be used for identification and detailed assessment of aortic valve diseases, transesophageal echocardiography (TEE) is still a useful and fundamental technique for diagnosis of such abnormalities.

Congenital aortic valve abnormalities account for 3% to 6% of congenital valve diseases in adults. The most common aortic valve abnormality is bicuspid aortic valve (accounting for 2%), followed

by unicuspid and quadricuspid aortic valves. To illustrate the validity and utility of TEE for the study of aortic valves, we present 2 noteworthy clinical cases.

Case 1 (Fig. 1). A 30-year-old man who had been diagnosed in infancy with a bicuspid aortic valve was under study due to progressive dyspnea. Transthoracic echocardiography showed extensive stenosis and disruption of the aortic valve. TEE was performed for a more accurate anatomical assessment. The TEE study revealed a unicommissural unicuspid valve (UCV) and extensive calcification and stenosis (Fig. 1A); there was also an aneurysm of the ascending aorta, measuring 50 mm, without associated complications. To complete the study underwent preoperative magnetic resonance that, however, reported that the aortic valve was bicuspid (Fig. 1C) as well as the existence of aortic aneurysm (Fig. 1B) and the absence of birth abnormalities coronary arteries. The patient finally underwent valvular and aortic surgery, and the surgeon confirmed the presence of a UCV (Fig. 1D).

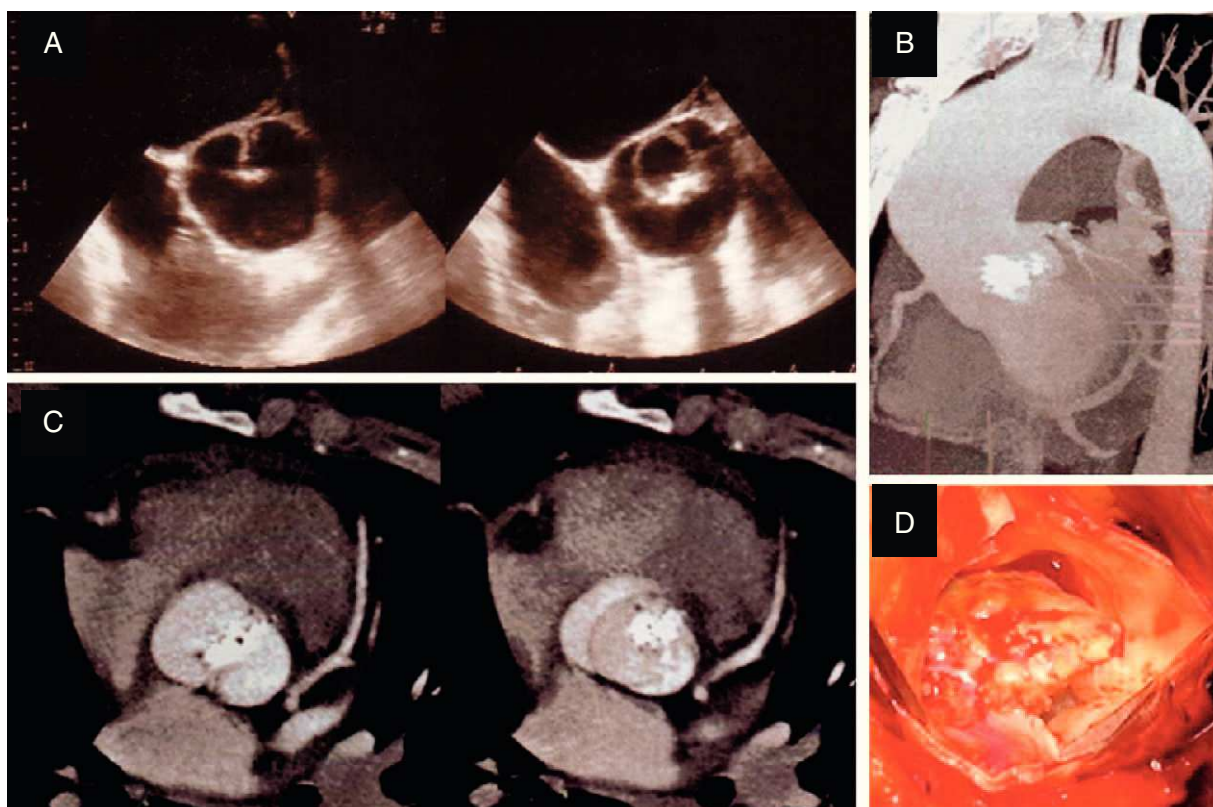


Figure 1. Unicuspid aortic valve.