

## Images in Congenital Cardiac Disease

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# A case of a tetralogy of Fallot patient treated only with classic Blalock–Taussig–Thomas shunt in modern life

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### Abstract

We showed images of classic Blalock–Taussig–Thomas shunt in a 35-year-old male patient with tetralogy of Fallot who underwent palliative surgery in 1992. It is a rare image echocardiography in our modern life.

The classic Blalock–Taussig–Thomas shunt is a breakthrough in the treatment of cyanotic CHD [1], specifically the tetralogy of Fallot. The baby first underwent surgery and then passed away due to some complications. Therefore, the classic Blalock–Taussig–Thomas shunt, using the left subclavian artery to supply blood flow to the pulmonary artery, was gradually replaced by the modified Blalock–Taussig shunt in later palliative surgeries. Hence, nowadays, it is a rare chance for young doctors to meet a classic Blalock–Taussig–Thomas shunt image on current practicing echocardiography. The images from a 35-year-old male patient with the Fallot came to our hospital for a cardiovascular check-up. More than 30 years after his first surgery to repair Fallot with only a classic Blalock–Taussig–Thomas shunt and lost follow-up after that. An imaging examination showed good classic Blalock–Taussig–Thomas shunt flow. More than 30 years after his first surgery to repair Fallot with only a classic Blalock–Taussig–Thomas shunt, an imaging examination showed good classic Blalock–Taussig–Thomas shunt flow. A natural stenosis at the shunt anastomosis with aliasing in colour Doppler and high velocity 3.9 m/s, high-pressure gradient 63 mmHg in echocardiography. The patient so far has almost no clinical symptoms, 94% saturation in room air. Interesting images on echocardiography and cardiac CT reminded us about historical milestones in the surgery of cyanosis CHD.

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**Completing interests.** The authors declare that they have no conflict of interest.

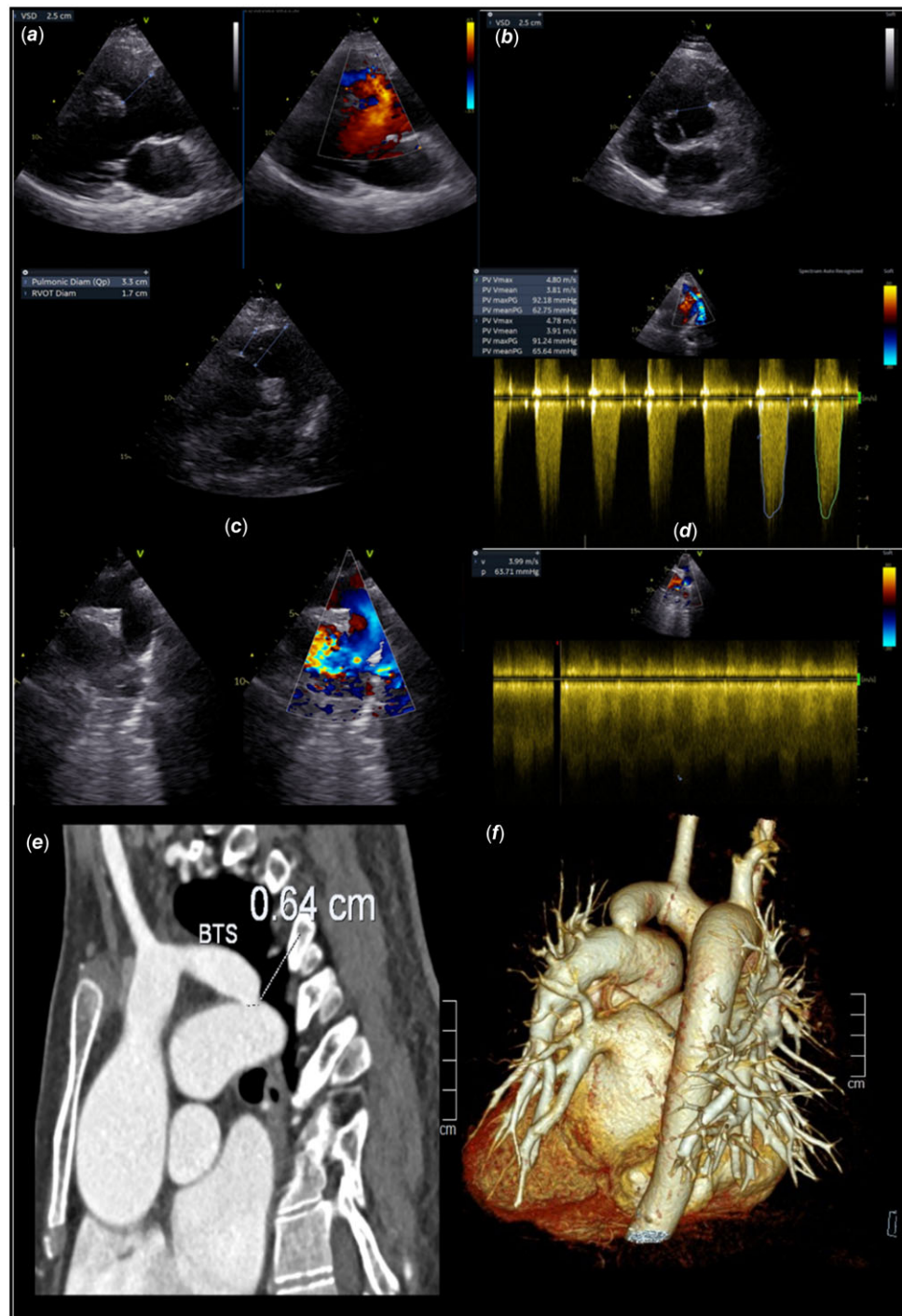
**Ethical standards.** This clinical case involves a human participant and, using echocardiography and CTA images was in accordance with the ethical standards of institutional and national research committee.

### Reference

1. Blalock A, Taussig HB. Landmark article May 19, 1945: the surgical treatment of malformations of the heart in which there is pulmonary stenosis or pulmonary atresia. *JAMA* 1984; 251: 2123–2138. DOI: [10.1001/jama.1984.03340400051025](https://doi.org/10.1001/jama.1984.03340400051025).

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**Figure 1.** A-F: Echocardiography: Two-dimensional echocardiography with Doppler reveals uncorrected tetralogy of Fallot with an overriding aorta (A), a large perimembranous ventricular septal defect (A, B), right outflow tract stenosis (C, D) with high-pressure gradient of 92/62 mmHg, and marked right ventricular hypertrophy. In addition, it showed patent classic Blalock-Taussig-Thomas shunt between the left subclavian artery and the left pulmonary artery (E) with aliasing at the anastomosis with a pressure gradient of 63 mmHg (F). **G:** multi-slice computed tomography reconstruction showed the classic Blalock-Taussig-Thomas shunt. Noted a 6.4 mm anastomosis stenosis (white arrow), the dilated left pulmonary artery, and the right aortic arch.