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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

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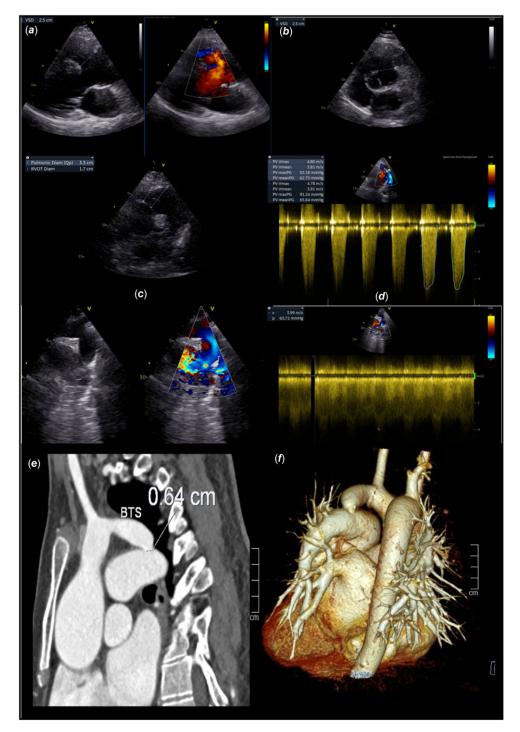


Figure 1. A-F: Echocardiography: Two-dimensional echocardiography with Doppler reveals uncorrected tetralogy of Fallot with an overriding aorta (A), a large perimembranous ventricular septal defect (A, B), right outflow tract stenosis (C, D) with high-pressure gradient of 92/62 mmHg, and marked right 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.