

Od20303 Prenatal diagnosis of combined congenital arteriopoortal shunt and congenital portosystemic venous shunt : a case report

Haruka Wada¹⁾, Yoko Nagayasu¹⁾ Nagisa Ishikawa¹⁾, Daisuke Fujita¹⁾, Tomohito Tanaka¹⁾
Department of Obstetrics and Gynecology, Osaka Medical and Pharmaceutical University, Osaka, Japan

Background:

Rare congenital vascular anomalies: **APS** and **CPSVS**

APS: abnormal communication between a systemic artery and the portal vein

CPSVS: abnormal communication between the portal vein and systemic veins

No previous report of prenatal diagnosis of combined APS and CPSVS

Discussion:

The abnormal aorta-to-ductus venosus Doppler finding likely reflected the combined hemodynamic effects of APS and CPSVS.

Increased NT was the first prenatal clue, preceding the development of mild cardiomegaly.

Prenatal recognition enabled appropriate postnatal evaluation and favorable clinical outcome.

Conclusion:

Combined congenital APS and CPSVS should be considered when an abnormal vessel connecting the aorta and ductus venosus is detected during the first trimester.

Early prenatal diagnosis may facilitate appropriate perinatal management and postnatal evaluation

Case presentation: 29-year-old woman, G2P1

15+3 weeks

- Increased nuchal translucency (NT)
- Abnormal vessel between the aorta and ductus venosus (DV)
- No structural cardiac anomaly

27 weeks

- Mild cardiomegaly (transverse cardiac diameter: 33 mm)
- Preserved cardiac function
- Appropriate fetal growth

39 weeks

- Spontaneous vaginal delivery
- Male infant, 3,076 g
- Apgar score 9/10

Postnatal diagnosis

- Contrast-enhanced CT
 - APS: left inferior phrenic artery to portal vein
 - CPSVS: portal vein to inferior vena cava
- Abdominal ultrasound confirmed both shunts
- Discharged on day 5; spontaneous shunt closure on follow-up

Figure 1. Prenatal color Doppler showing an aberrant aorta-to-DV communication.

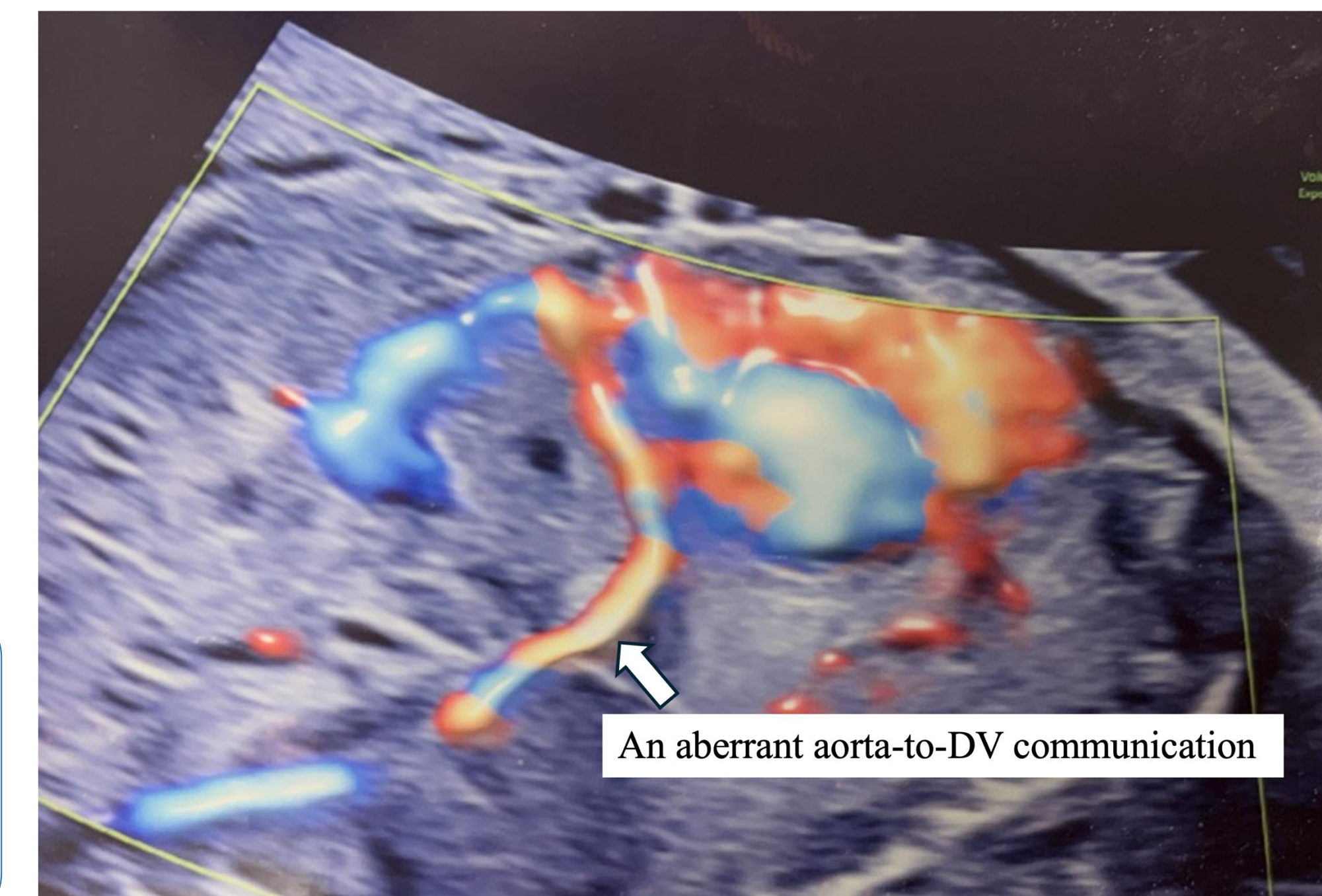


Figure 2. Postnatal contrast-enhanced CT

