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Objectives
Prenatal ventricular outpouchings (VOs) including congenital ventricular aneurysms (CAs) and congenital ventricular diverticula (CD) are very rare. This study aimed to describe the features and outcomes of prenatal VOs to explore their etiologies and provide guidance for rational counseling and management both prenatally and postnatally.

Methods
Patients prenatally diagnosed with CAs and CD in our center between June 2014 and January 2018 were recruited. The prenatal echo data were reviewed, and during follow-up period, fetal outcomes were recorded.

Results
A total of 25 VOs were identified. Except for in one fetus with CD, no gene abnormalities were found. One CA fetus and one CD fetus were examined by autopsy. Histopathology showed that the CA wall was substituted by collagen fibers. During follow-up, none of the 8 born patients experienced adverse events, and three VOs near the tricuspid annulus almost disappeared, though one was extremely large.

Conclusion
In our center, all the born patients had good prognoses. The VOs located near the right ventricular annulus may have been caused by prenatally unbalanced pressure and may have begun to decrease after birth when the right heart pressure declined. Termination of pregnancy may not be a good choice for these patients.

Figure 1. Fetal 2-dimensional echocardiogram at 34 weeks’ gestation: four-chamber view showed an aneurism connecting with the right ventricle near the tricuspid annulus with a broad neck (A). Echocardiogram at three years old: four-chamber view showed the right ventricular base was almost normal (B). CA, congenital ventricular aneurism; LA, left atrium; RA, right atrium; LV, left ventricle; RV, right ventricle