**Introduction**

Establish a fetal congenital heart disease (CHD) cross-section image database (CSD) to enhance interpretation of ultrasound images obtained from the transverse scanning screening (TSS) protocol to improve prenatal detection of CHD.

**Materials and methods**

From January 2009 to December 2018, transverse real-time 2-dimensional clips were obtained by directing the transducer from the fetal abdomen to the upper chest that included the following: four-chamber, left and right ventricular outflow tracts, transverse ductal and transverse aortic arch, trachea views. The digital cross-sectional ultrasound clips were stored in a database (UCSD). Fetuses in which pathology specimens were available were used to establish a CHD anatomical cross-sectional database (ACSD). The combination of the UCSD and ACSD constituted the CSD.

**Conclusion**

The high consistency between UCSD and ACSD can help physicians and sonographers to master the anatomical and ultrasound characteristics of different types of CHD. This could result in an increase in the implementation of the TSS technique, proposed by ISUOG.

**Result**

160 CSDs were established, 48 of them had both UCSD and ACSD, 19 fetuses had only ACSD, and 93 fetuses had only UCSD. During a continuously looped digital display of the UCSD and ACSD, the five views from the four-chamber to the tracheal view were clearly displayed and in high consistency.