Foetal Cardiac Anomalies: Antenatal detection rate following introduction of Outflow Tract Views and their perinatal outcomes

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Objectives:
To ascertain the detection rate of cardiac anomalies at the Heart of England NHS Trust after the implementation of the FASP guidelines on obtaining the outflow tract views and comparison to the previous audit.

Methods:
Data was collected retrospectively from multiple sources including foetal medicine, maternity information system and neonatal databases. Cases were identified via local foetal medicine referral criteria and cross-referenced against The West Midlands anomaly register. Perinatal data was retrieved locally and from the tertiary referral centre, Birmingham Children’s Hospital.

Results:
Seventy one patients were identified between July 2011 and December 2012 with cardiac abnormalities diagnosed both antenatally and postnatally. The incidence of cardiac anomalies including minor anomalies in this time period was 4.3/1000 births which was similar in the previous audit 5/1000.

Conclusions:

The antenatal detection rate was 68.8% which is higher than the detection rate prior to the introduction of Outflow tract views of 52.14% and over the national predicted detection rate of 50%.

In the cases missed, 75 % were Outflow tract abnormalities

Limitations - e.g., Coarctation of aorta difficult to diagnose AN period, fistulas and TAPVD can be challenging.

High incidence of chromosomal abnormalities (66.6%), hence karyotyping in this group is justified.