P18.01 - New explanation of false positive diagnosis of coarctation of the aorta during fetal life

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OBJECTIVES

Disproportion in the four chamber view is usually a first symptom to suspect coarctation of the aorta during fetal life. On the other side it is usually the most common false positive sign. We present the group of fetuses with disproportion in four chamber view suspecting CoA with no confirmation after delivery.

METHODS

We retrospectively selected fetuses with disproportion in four chamber view and suspicion of the CoA which had umbilical cord wrapped around the body. Ten cases of prenatal suspicion of the coarctation of the aorta coincidence with the umbilical cord wrapped around the fetal body were found in the Filemaker database of the Fetal Cardiology Department. Only single pregnancies were taken into account. In all cases another cardiac and extracardiac malformations were excluded.

RESULTS

• The mean maternal age was 29.6 years. The mean gestational age was 33 7/8 weeks.
• All fetuses were in a good cardiovascular condition.
• The usual position of the umbilical cord was neck, but they were also location around abdomen or lower limb. At birth, all newborns had normal anatomy of the heart.
• We conclude that the explanation of the false diagnosis was hemodynamic, resulting from the compression of the fetal neck by the umbilical cord that resulted in a disproportion of cardiac blood flow and was “mimicking” the signs CoA.

CONCLUSION

1. Functional anomalies in fetal echocardiography can mimic prenatal signs of CoA.
2. Umbilical cord around the fetus neck should be taken into consideration in differential diagnosis of CoA.