Single umbilical artery, associated fetal abnormalities and the genetic counselling.

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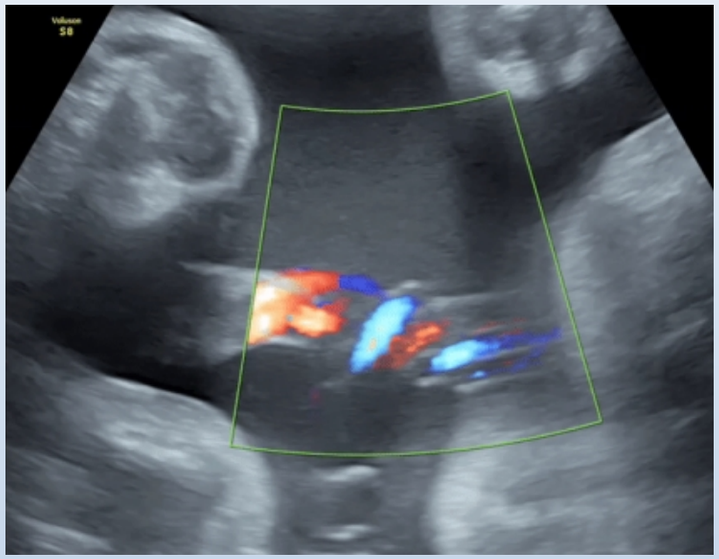
Objective Single umbilical artery is an isolated finding in the majority of the cases, however it can be associated with chromosomal trisomies and a great variety of structural abnormalities. The aim of this study was to determine the frequency, types and severity of fetal abnormalities in a Central European pregnant population with single umbilical artery.

Materials and Methods Women diagnosed with single umbilical artery in the regional obstetric clinics were referred to g enetic c ounselling. A database of maternal and fetal details w ere established and analyzed . Associated abnormalities were classified according to type, frequency and organ system localization.



Linked-conditions	N=	Rate
SUA without abnormalities	143	74%
Urogenital	13	7%
Sceletal	13	7%
Cardiovascularis	9	5%
Chromosomal	7	4%
Nerve system	5	3%
Gastrointestinal	4	2%
Total	194	100%

Results Pregnancies (N=194) with single umbilical artery were counselled and treated between 2005 and 2016. Isolated and combined form of SUA occured in 143 (73%) and 51 (27%) cases, respectively. Six cases of single umbilical artery wth chromosomal trisomies and 42 cases of SUA combined with single (27) or multiple (15) fetal structural anomalies were found.

Conclusion Early ultrasound detection of single umbilical artery and genetic counselling is recommended including cytogenetic studies and second trimester anomaly scan for fetal anomalies knowing that some of them may remain undetected during pregnancy.

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