

A Case of Early Appearance Foetal Intra-Abdominal Umbilical Vein Varix

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Introduction

Foetal intra-abdominal umbilical vein varix (FIUVV) is an uncommon finding with uncertain prevalence, sometimes described as infrequently as 0.04% of all pregnancies. An FIUVV is defined as dilatation of a foetal umbilical vein segment by >50% (or subjectively >9mm in diameter) when compared to the adjacent segment (1). Of these cases, up to 30% may be associated with other foetal abnormalities, with the urological system most commonly associated. There is also a known association with foetal aneuploidy (2). Here we describe an FIUVV identified at 23 weeks, monitored in the context of foetal growth restriction, and discuss recommendations regarding investigation and management.

Case

A 33-year-old G2P0 underwent specialised obstetric ultrasonography at 23 weeks gestation, for assessment of foetal talipes noted on morphology scan. A small umbilical varix was noted at 6.9mm, and four-weekly imaging was recommended. FIUVV was noted again at 8mm, 9.4mm, and then 11.1mm at 35 weeks gestation, with no sign of turbulent flow at any stage. There were no further assessments of the umbilical varix, but ongoing AFI and Doppler monitoring was normal.

Foetal growth was noted to be slow, with an estimated foetal weight (EFW, Mikolajczyk) dropping from 29th to 7th percentile over the same time period. Persistent bilateral talipes was also identified, and a postnatal paediatric review was recommended.

The patient gave birth to a healthy baby boy at 39 weeks of gestation, with a birthweight on the 47th centile and bilateral talipes which was assessed as flexible talipes and no further follow-up suggested.

Discussion

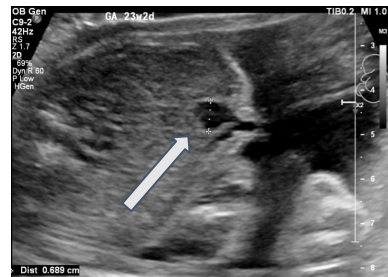
FIUVV is best identified with ultrasound imaging, with prognosis varying based on varix diameter, turbulence of flow (or lack thereof), and the presence or absence of additional anomalies. It is important to distinguish a potential FIUVV from findings such as choledochal or ovarian cyst (3).

Conclusion

Due to its rate of association with other foetal abnormalities, FIUVV should be monitored closely and the foetus investigated appropriately for additional anomalies as outlined above. Regular monitoring should be organised from the time of diagnosis, and counselling undertaken when there is suspicion of accompanying aneuploidy, additional anatomical abnormalities, or other potential foetal compromise.



35w2d: 11.1mm



23w2d: 6.89mm

References:

- 1) Byers BD, Goharkhay N, Mateus J, Ward KK, Munn MB, Wen TS. Pregnancy outcome after ultrasound diagnosis of fetal intra-abdominal umbilical vein varix. *Ultrasound Obstet Gynecol* [internet]. 2009;33, p282-286. doi:10.1002/uog.6233.
- 2) Shah KH, Nambiyar R, Bhat S. Prenatal diagnosis and management of fetal intra-abdominal umbilical vein varix. *J Family Med Prim Care* [internet]. 2018;7(2): p458-460. doi:10.4103/jfmpc.jfmpc_76_17.