

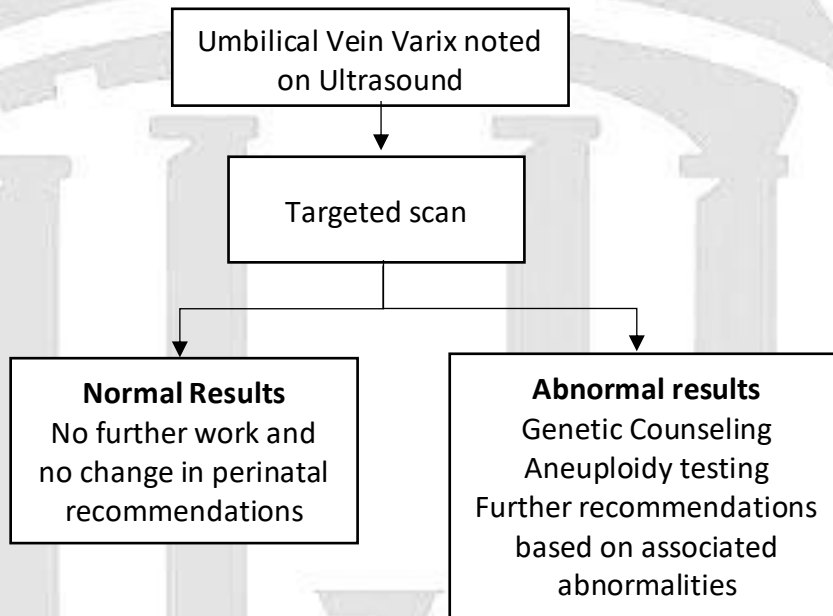
## Umbilical Vein Varix

Diagnosis: An umbilical vein varix is a focal dilation of the umbilical vein just within the abdominal wall. It is diagnosed with the following criteria: A portion of the intra-abdominal UV that is at least 50% wider than the non-dilated portion or dilation of  $\geq 9\text{mm}$ .

Associated Risks with non-isolated varix:

1. Structural abnormalities. (about 20%)
2. Aneuploidy
3. Fetal Demise
4. Growth restriction

No apparent increased risks if the finding is isolated.



.pdxumbilvarix

An umbilical vein varix is a focal dilation of the umbilical vein just within the abdominal wall. It is diagnosed with the following criteria: A portion of the intra-abdominal UV that is at least 50% wider than the non-dilated portion or dilation of  $\geq 9\text{mm}$ . These occur in 0.4 to 1.1 per thousand births. When first described sonographically in the early 2000s, these were reported to be associated with increased rates of fetal demise, fetal aneuploidy and SGA births. Women with this diagnosis were recommended to undergo intensive fetal surveillance. More recent reports, including multicenter retrospective studies and a meta-analysis underscore the importance of whether the varix is isolated or not.

Di Pasquo and others reported a meta-analysis in 2018 of about 250 fetuses with the diagnosis of an umbilical vein varix from 5 studies. There were no cases of varix or umbilical vein thrombosis. Nineteen percent (95% CI 10.9-29.1%) had additional ultrasound findings and 3 others had post natal abnormalities identified. There were no cases of fetal demise or fetal aneuploidy if the varix was an isolated finding; overall there was a 4.6% rate of aneuploidy (95% CI 0.4-12.9%) with trisomy 21 being the most common finding and a 1.3% rate of fetal demise (95% CI 0.3-3.1%). The overall pooled SGA rate was only 3.7%.

All poor outcomes reported were found in the non-isolated cases. In these, the rates of aneuploidy was 19.6% resulting in an odds ratio of 14.8(95% CI 2.9- 73); the rate of fetal demise was 7.3% with an OR of 8.2 (95% CI 1.05-63) compared to those with isolated varix.

A year later, a multicenter retrospective study contributed another 20 cases which in abstract form found similar outcomes. About 20% had associated abnormalities and those with aneuploidy or fetal loss were confined to these non-isolated cases.

Your patient has an isolated umbilical vein varix. She had \*\*\*an earlier risk-reducing cell free DNA screening study \*\*\*\*a negative quad screen \*\*\*a negative diagnostic test. We do not recommend any change in her prenatal care based on this isolated finding.

#### References

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***These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur during pregnancy. They should not be interpreted as a standard of care, but instead represent guidelines for management. Variation in practices should take into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities.***

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