



VASA PREVIA



Vasa previa occurs when fetal vessels are not fully contained and protected within the umbilical cord. Rather, exposed vessels connecting the umbilical cord and placenta run through the membranes within 2 cm of the internal cervical os. **This condition risks** severe bleeding and compromised oxygen supply during labor or membrane rupture, potentially causing fetal distress, hypovolemic and hypoxic injury, or fetal death.

Vasa previa may occur on its own or in combination with other placental abnormalities:

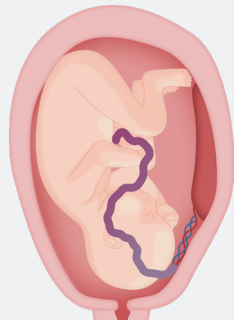
Velamentous cord insertion:

Umbilical cord inserts into the membranes rather than directly into the placenta.

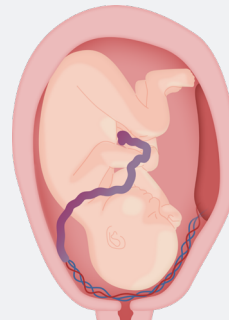
Multilobed placenta:

The placenta forms two or more distinct lobes and the fetal vessels run between them.

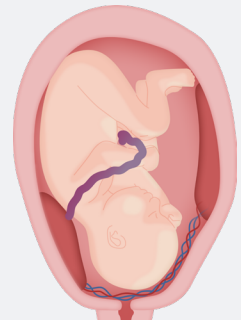
Vasa previa variations



Velamentous cord insertion, no vasa previa



Velamentous cord insertion with vasa previa



Bilobate placenta with vasa previa

Risk factors

- Placental abnormalities
- Low-lying placenta or placenta previa
- Prior cesarean section
- Other prior uterine surgery
- Multiple gestation
- IVF pregnancy

Clinical presentation

- Painless vaginal bleeding, often following onset of labor or rupture of membranes
- Decreased fetal heart rate variability, FHR decelerations, persistent bradycardia or sinusoidal FHR tracing

Management

Known vasa previa, identified on early ultrasound:

Cesarean delivery is recommended prior to rupture of membranes (ROM). As timing of labor and ROM are hard to predict, ideal timing of delivery is controversial. The aim is to balance the risk of fetal death and that of iatrogenic prematurity.

- Prenatal monitoring to detect cord compression
 - Non-stress testing twice weekly, starting at 28 to 30 weeks
 - More frequent, inpatient monitoring may be considered at 32 weeks.
- Serial cervical length monitoring may help guide timing of delivery.
- Corticosteroids for fetal lung development
- Planned cesarean delivery at 34 to 37 weeks

Client presenting for vaginal bleeding in 3rd trimester, or onset of labor/ROM prior to planned cesarean for known vasa previa:

- Initiate serial vital signs and electronic fetal monitoring.
- Ultrasound, if no prior diagnosis → vasa previa diagnosed
- Prepare client for emergent cesarean.
- Alert NICU team → prepare for neonatal volume replacement/blood transfusion as needed