

## Vasa Previa

Vasa Previa ("vessel preview") is a condition in which fetal vessels totally or partially cover the internal cervical os. Risk factors for this condition include velamentous umbilical cord insertion onto the placenta, abnormalities with the placenta itself, and multiparity. Patients may present with rupture of membranes and painless vaginal bleeding. Fetal distress can be evident. Diagnosis is quickly made via doppler ultrasound and treatment is emergency Cesarean delivery.



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### Characteristics

#### Fetal Vessels Over Internal Cervical Os

[Fetus holding Vessel over Internal Cervix-certificate](#)

Vasa previa involves fetal vessels in the membranes running over or in close proximity to the internal os of the cervix. This puts the vessels at risk of injury if the membranes rupture and can lead to exsanguination and fetal death.

### Risk Factors

#### Velamentous Umbilical Cord Insertion

[Veiled-Man Umbilical-Cord Umbrella](#)

Vasa previa is frequently associated with velamentous umbilical cord insertions. This involves the cord inserting into the chorioamniotic membrane rather than the placenta, which leads to fetal vessels traveling to the placenta unprotected by Wharton's jelly.

#### Placental Abnormalities

[Abnormal Placenta-present](#)

Placental abnormalities such as a bilobate or succenturiate placenta is a variation of placental morphology with one or more accessory lobes developing separately from the main placental body. This can lead to vasa previa, placenta previa, and retained placental tissue.

#### Multiparity

[Multiple Children](#)

Multiparity, or a female who has carried more than one fetus > 20 weeks of gestation is associated with a greater risk of vasa previa.

### Presentation

#### Rupture of Membranes

[Ruptured Membranes in Blood](#)

The triad of symptoms with vasa previa involves membrane rupture, painless vaginal bleeding, and fetal bradycardia or fetal death.

## **Painless Vaginal Bleeding**

[No Pain-bolt signs and Vagina-violets Bleeding](#)

The painless vaginal bleeding (fetal blood) occurs suddenly after membrane rupture.

## **Fetal Distress**

[Fetus shooting Flare-gun](#)

Fetal distress includes fetal bradycardia (<110 bpm), decelerations or sinusoidal pattern on fetal heart tracings. Fetal death can quickly occur through exsanguination or asphyxiation if fetal vessels are compressed during labor.

## **Diagnosis**

### **Doppler Ultrasound**

[Doppler-weatherman using Ultrasound](#)

A transabdominal or transvaginal U/S with color doppler shows fetal vessels overlying the internal os and decreased blood flow within fetal vessels.

## **Treatment**

### **Emergency Cesarean Delivery**

[Emergency-Lights C-section](#)

An emergency C-section is usually indicated if there are signs of fetal distress.