

CORD WITHOUT CUSHION - A RARE CASE REPORT OF ABSENT WHARTON'S JELLY

OBJECTIVE

- To report a rare case of absent Wharton's jelly in umbilical cord, presented as severe Intrauterine growth restriction (IUGR), abnormal fetal doppler findings and adverse perinatal outcomes.
- To highlight the importance of thorough postnatal examination and to increase antenatal diagnosis of umbilical cord anomalies.



CASE REPORT

- 36 years old Primigravida Unsure of gestational age admitted in labor with abdominal pain
- Physical examination: 34 weeks, Ultrasound : Biometry of 33-34 weeks , Abnormal doppler- Reduced EDF, High PI (1.64)
- Labor augmented as abnormal CTG and meconium stained liquor
- Category 1 Cesarean section as pathological CTG
- Outcome: 2.12 kg Male baby, APGAR: 1 at 1minute – immediately intubated and admitted in NICU, Umbilical artery pH: 7.13 (Acidotic)
- **Umbilical cord : Completely absent Wharton's jelly.**
- **3 separated vessels without any interlacing substance**
- **Ballard scoring: 38 weeks alarming severe IUGR**

DISCUSSION

- Wharton's jelly is a gelatinous extracellular matrix surrounding umbilical cord vessels, providing structural integrity and protection from vascular compression.
- Incidence of absence is unclear, extremely rare, endangering the fetus to vascular compromise, hypoxia leading to IUGR, adverse perinatal outcomes such as fetal distress, fetal acidosis, and perinatal mortality.

- Theories suggesting the absence are related to degeneration, early incomplete mesenchymal umbilical tissue fusion, or hypoplasia of amnion and secondary loss of Wharton's jelly.
- Reported cases can be classified as complete or focal absence of jelly. In this case, diagnosed as complete absence of Wharton's jelly complicated with IUGR, pathological CTG and fetal acidosis.
- Existing literature reports most of the similar cases with meconium-stained liquor, non reassuring CTG, and adverse perinatal outcomes.
- Antenatal diagnosis could be possible but challenging due to rare incidence and nonspecific findings in ultrasound which may mimic other umbilical anomalies. But detecting these umbilical cord anomalies might help to predict complications hence to prevent adverse outcomes.

CONCLUSION

Postnatal detailed examination of placenta and umbilical cord is necessary to identify and diagnose such rare anomalies especially in cases of adverse perinatal outcomes. Enhanced antenatal ultrasound evaluation of umbilical cord structure and cord thickness may help suspecting such anomalies to allow timely intervention.