CASE REPORT ABOUT VASA PREVIA – A RARE FORM OF ABNORMAL PLACENTATION

Gul-e- Irum S

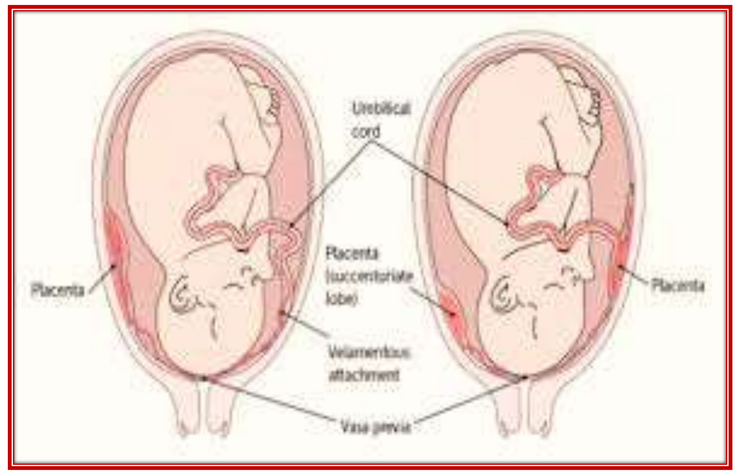
MATERNITY HOSPITAL – DR SULAIMAN AL HABIB MEDICAL GROUP – OLAYA BRANCH, RIYADH, KINGDOM OF SAUDI ARABIA

SUMMARY

Vasa previa is a rare clinical condition that can lead to profound fetal distress or fetal death. It is a Case report of 29 year old primigravida presented at term with rupture of membranes, vaginal bleeding and fetal distress in Emergency department of Maternity hospital, Dr Sulaiman Al Habib Medical Group, Olaya, Riyadh. An emergency caesarian section was conducted due to severe fetal distress (CTG image) and delivered an alive baby with Apgar score of 5&7.Placental examination showed velamentous insertion of cord with unprotected vessel running to the placenta representing a rare clinical condition of vasa previa (Image). Both mother and baby were discharged in good condition on 4th postoperative day.

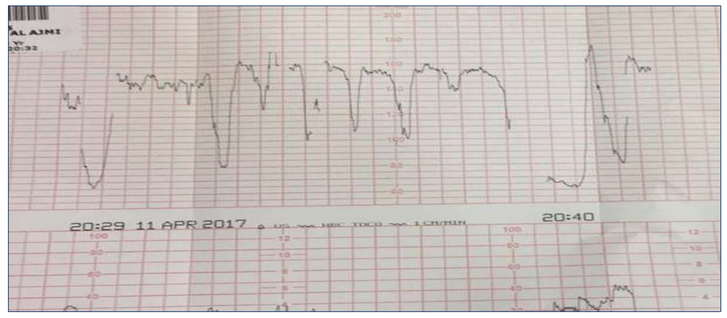
Accurate detection of condition and timely intervention is the key to avoid associated perinatal morbidity and significant mortality. . However prenatal detection of condition may result in substantial improvement in outcome

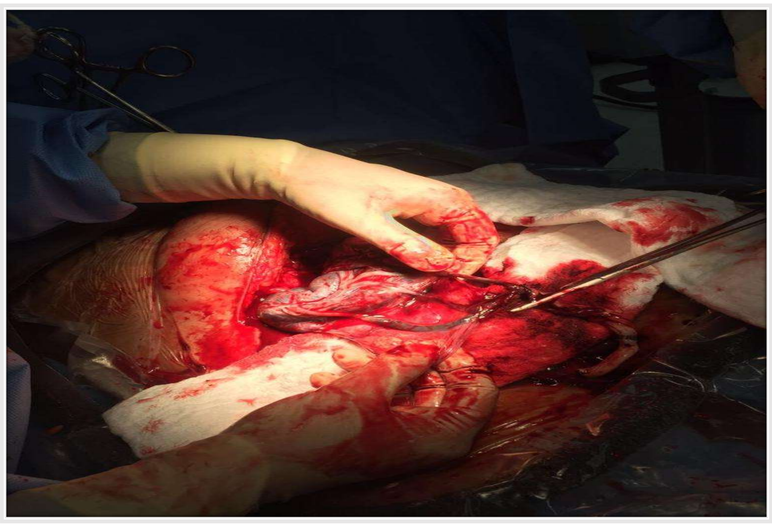
Key words: *Vasa previa, Prenatal detection, Velamentous insertion, Vaginal bleeding, Fetal distress*



INTRODUCTION:

- Vasa previa is an uncommon variant of placental anatomy, occurring **in 1:1200 to 1:5000 pregnancies** [6-8].
- It is a condition in which umbilical cord is inserted into the membranes, through which vessels run unprotected until they enter the placenta [1-3].
- Two main **causes** of vasa previa - **Type 1 vasa previa - velamentous insertion**, where the cord inserts directly into the membranes (25-62%). **Type 2 vasa previa** - when vessels cross between the lobes of placenta such as in **succenturiate or bilobate placentae** (33-75%). [2, 5, 6, 8].
- The **classic presentation** is rupture of membranes followed by painless, dark vaginal bleeding associated with profound fetal distress or fetal death. It can cause abnormal intrapartum fetal heart rate patterns including sinusoidal tracings and severe variable decelerations [1-4, 6, 8].
- **Risk factors** - low-lying placenta, placenta previa, multiple pregnancies, multi-lobate placenta, velamentous insertion, placenta membranacea and in-vitro fertilization.
- **Diagnosis** is occasionally made by palpation of fetal vessels within the intact membranes at the time of vaginal examination and by amnioscopy. **Sonographic diagnosis is the gold standard** [1-3, 5-7, 9].
- **Primary prevention** of vasa previa is **not** possible, however, hemorrhage is preventable with **antenatal screening for high-risk women and cesarean delivery at 37-38 weeks when vasa previa is diagnosed** [2, 3, 6 and 7].



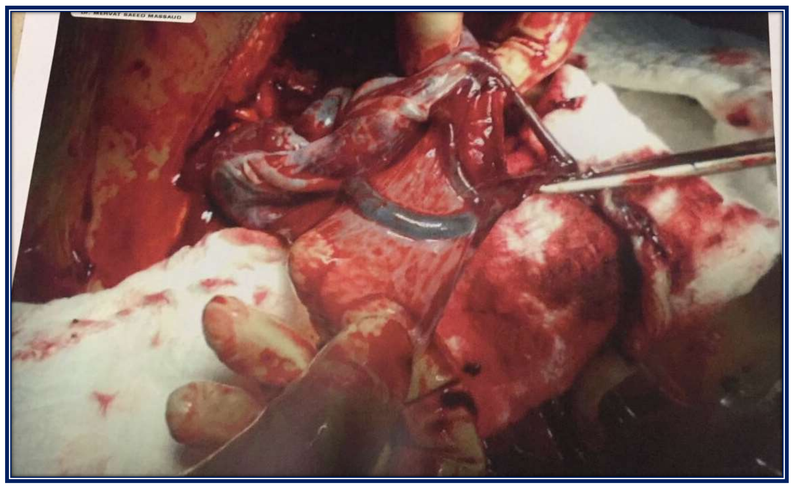


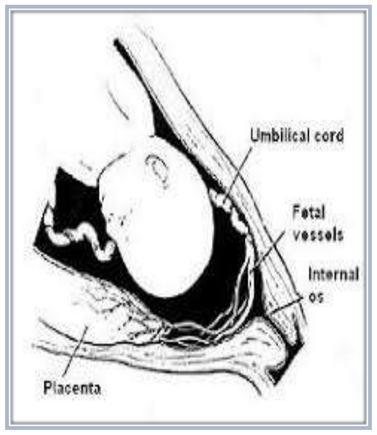
CASE REPORT:

- 29 years old, healthy primigravida, booked late for antenatal care at 32weeks. Her past history was unremarkable.
- Lab investigations were normal. She was Rh –ve and her husband Rh+ve, while antibody screen was found negative.
- She had antenatal visits at a polyclinic. Pregnancy had been uneventful except one episode of vaginal bleeding at 8 weeks when she was given anti-D injection. Routine antenatal anti D prophylaxis was given at 32 weeks.
- She presented to emergency department at 37+3 weeks with ruptured membranes for half hour associated with mild vaginal bleeding mild labor pains
- Examination revealed stable vital signs, Soft, not tender abdomen with fundal height corresponding to dates. Fetal lie was longitudinal with cephalic presentation.
- On vaginal examination, cervix was 2-3 cm dilated, 60% effaced, vertex at -3 station, absent membranes, draining liquor mixed with blood.
- CTG showed 2 mild **C**ontractions/10 min, **B**aseline **R**ate of 150, minimal **V**ariability, +ve **A**ccelerations and recurrent variable deep **D**ecelerations up to 60 bpm.
- Patient was immediately shifted to theatre for emergency caesarian delivery in view of pathological CTG trace. There was suspicion of placental abruption/vasa praevia. Outcome was an alive baby girl, birth weight of 2430 grams with Apgar score of 5/7 at 1 and 5 minutes.
- Placental examination showed velamentous insertion of cord with unprotected vessels running to the placenta (image).
- Baby was examined by pediatrician and both mother and baby were discharged in good condition on 4th postoperative day.

DISCUSSION:

- We are reporting a **rare case** of vasa previa who presented with **classic picture** of ruptured membranes, vaginal bleeding and pathological CTG trace. **Urgent intervention** is needed in such cases to avoid associated high prevalence of perinatal mortality [2, 6].
- Major complications of vasa previa are **rupture of the vessels** carrying fetal blood, **compression of vessels and perinatal mortality rate of 50 - 75%** in undiagnosed cases. There is 3% risk of perinatal mortality in cases who are diagnosed prenatally [3, 6,10].
- Higher level of **vigilance** is needed while performing **amniotomy** in every patient because majority of vasa previa cases remain unidentified until the time of delivery. **A high index of suspicion and timely intervention in form of immediate delivery** followed by aggressive resuscitation were necessary to avoid fetal shock or death when vaginal bleeding occurred during labor. [2, 6]
- **Emergency caesarean delivery and neonatal resuscitation**, including the use of blood transfusion if required, are essential in the management of ruptured vasa previa diagnosed during labour. [11]





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About the Author:

DR GUL-E-IRUM SAADAT

MBBS Pakistan
MRCOG UK

Senior Registrar
Dr. Sulaiman al Habib Medical Group
E mail: *irumdr123@hotmail.com*

Mob : +966551580147