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PREGNANCY-PLACENTAL PREVIA

A CASE REPORT.

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ABSTRACT:

Placental Previa is a complication which occurs during the pregnancy. In this condition the placenta covers the opening of the cervix. This is frequently associated with severe Obstetric Hemorrhage.

A 35 year old female patient was admitted in Obstetrics and gynecology ward of KIMS for safe confinement as she had been diagnosed with placenta Previa. She had spontaneous conception and history of missed abortion and preterm vaginal birth. Her placenta was posterior and upper segment extending up to internal OS. Later placenta extended into LUS as the pregnancy progressed. The management here included C-section [lscs] with Foley bulb induction which is a safe and effective way to induce labor during pregnancy. The Foley bulb is being filled with saline [100ml]. the hemorrhage was prevented by giving misoprostol , so the hemorrhage was not observed . The patient was discharged in stable condition with prescribed antibiotics and baby was also safe.

Key Words: Placental Previa, LUS, Internal OS, Hemorrhage.

Introduction:

In Placental previa the placenta is implanted in the lower uterine segment such that it completely or partially covers the cervix or is close enough to the cervix to cause bleeding when the cervix dilated or the lower uterine segment effaces.

The placenta grows during pregnancy and feeds the developing baby. The cervix is the opening to the birth canal.

Causes:

During pregnancy, the placenta moves as the womb stretches and grows. It is very common for the placenta to be low in the womb in early pregnancy. But as the pregnancy continues, the placenta moves to the top of the womb. By the third trimester, the placenta should be near the top of the womb, so the cervix is open for delivery.

Sometimes, the placenta partly or completely covers the cervix. This is called as previa. There are different types of placenta previa :

Marginal - The placenta is next to the cervix but does not cover the opening.

Partial - The placenta covers the part of the cervical opening.

Complete - The placenta covers all of the cervical opening.

Etiology:

The underlying cause of placental previa is unknown. There is however, an association between endometrial damage and uterine scarring. The implantation of a zygote (fertilized egg) requires an environment rich in oxygen and collagen. The outer layer of the dividing zygote, blastocysts, is made up of trophoblast cells which develops into the placenta and fetal membranes. The trophoblast adheres to the decidua basalis of the endometrium, forming a normal pregnancy. Prior uterine scars provide an environment that is rich in oxygen and collagen. The trophoblast can adhere to the uterine scar leading to the placenta covering the cervical os or the placenta invading the walls of the myometrium.

Epidemiology:

Placenta previa affects 0.3% to 2% of pregnancies in the third trimester and has become more evident secondary to the increasing rates of cesarean section. It occurs in 1 out of 200 pregnancies. It is more common in women who have:

- An abnormally shaped uterus
- Had many pregnancies in the past
- Had multiple pregnancies, such as twins or triplets
- Scarring on the lining of the uterus due to a history of surgery, C-section, or abortion
- In vitro fertilization
- Women who smoke, use cocaine, or have their children at an older age may also have an increased risk.

Pathophysiology:

Placenta previa is the complete or partial covering of the cervix. A low-lying placenta is where the edge is within 2 to 3.5 cm from the internal os. Marginal placenta previa is where the placental edge is within 2 cm of the internal os. The placenta itself does not move but grows toward the increased blood supply at the fundus, leaving the distal portion of the placenta at the lower uterine segment with relatively poor blood supply to regress and atrophy. Migration can also take place by the lower uterine segment thus increasing the distance from the lower margin of the placenta to the cervix.

Symptoms:

The main symptom of placenta previa is sudden bleeding from the vagina. Some women also have cramps. The bleeding often starts near the end of the second trimester or beginning of the third trimester.

Bleeding may be severe and life threatening. It may stop on its own but can start again days or weeks later.

Labor sometimes starts within several days of the heavy bleeding. Sometimes, bleeding may not occur until after labor starts.

Risk factor:

It is a major risk factor for postpartum hemorrhage and can lead to morbidity and mortality of the mother and neonate. This situation prevents a safe vaginal delivery and requires the delivery of the neonate to be via cesarean delivery. Most cases are diagnosed early on in pregnancy via sonography and others may present to the emergency room with painless vaginal bleeding in the second or third trimester of pregnancy. The presence of placenta previa can also increase a woman's risk for placenta accreta spectrum(PAS).

Evaluation:

Routine sonography in the first and second trimester of the pregnancy provides early identification of placenta previa. Nearly 90% of placentas identified as "low lying" will ultimately resolve by the third trimester. Follow up sonogram is recommended at 28 to 32 weeks of gestation to look for persistent placenta previa. A patient presenting with vaginal bleeding in the second or third trimester should receive a transabdominal sonogram before a digital examination. If there is a concern for placenta previa, then a transvaginal sonogram should be performed. Placenta accreta spectrum diagnosis is via ultrasonography with high sensitivities and specificities. MRI is useful for cases of posterior placenta previa.

Treatment:

In bleeding condition-

Vaginal bleeding after 20 weeks is treated as a medical emergency. The mother may be admitted to the hospital's labor and delivery unit. Both mother and the baby will be monitored, and the mother may need a blood transfusion to replace lost blood.

If the woman is at 36 weeks, she'll likely have a C-section to deliver the baby. If she has extreme blood loss or there's a risk to the health of the mother or the baby, an emergency C-section may be needed before 36 weeks.

With no bleeding-

The treatment goal is to lower the risk of possible bleeding and to get as close to the delivery date as possible. The care provider will likely recommend to avoid the following:

- Sexual intercourse
- Moderate or strenuous exercise
- Moderate or heavy lifting
- Standing for long periods of time

Planned C-section delivery-

Even if the woman had no bleeding during your pregnancy due to placenta previa

- Or no bleeding since the first episode
- She'll likely have a C-section delivery scheduled sometime between 36 and 37 weeks.

If the delivery is planned before 37 weeks, the health care provider will offer corticosteroids to help the baby's lungs develop.

Prognosis:

The biggest risk is severe bleeding that can be life threatening to the mother and baby. If the mother has severe bleeding, the baby may need to be delivered early, before major organs, such as the lungs, have developed.

Case report:

A 35 year old female patient, G3P1L1A1 [Gravida 3 ,para1] with gestational age of 36 weeks + 5 days, diagnosed with placental Previa [her placenta is found to be posterior ,upper segment extending upto internal OS as per her obstetric scan done on 18 July 2022] she is now admitted in gynecology and obstetrics ward of KIMS- secunrabed [Krishna institute of medical sciences] on 1st august 2022 for safe confinement.

The patient have had a spontaneous conception and A previous NVD[normal vaginal delivery]

In the past, Patient had received regular ANC [antenatal care] , regular folic acid ,regular iron , calcium supplementation

Dating scan :SEDD -29/8/2022 @ 8 weeks

Patient had received inj.TT 2 doses ,BOOSTRIX,VACCIFLU taken ,NT scan _normal , TIFFA SCAN _showed no anomalies, fetal 2D ECHO _ Showed echogenic focus in left ventricle [considered as normal variant generally harmless] , she was also admitted at 24 weeks in KIMS for acute GE ,

the perception of fetal moments is good , and she has no history of bleeding or leaking PV She also had a obstetric scan with Doppler on 18 /july/2022

SLIUF of 35 weeks gestational age and placenta is found to be posterior , upper segment extending into internal OS , Amniotic fluid index [AFI] was found to be 17.7cms, estimated fetal weight[EFW] was found to be as _2628 grams, it's also observed that there is single loop of cord around fetal neck and mild dolichocephalous appearance , Doppler _ was normal .

Patient menstrual history:

Last menstrual period [LMP] of the patient is: 17/11/21

Estimated delivery date [EDD] is: 24/8/2022.

All her previous menstrual cycles were regular with normal flow, lasting for about 3 to 5 days /28 _30 days, no pain, no clots.

Patient obstetric history:

G3P1L1A1

First pregnancy: A Missed abortion at 8 weeks, D and C were not done

Second pregnancy: She had spontaneous conception, she underwent full term natural vaginal delivery [FTNVD], male, 6M , and he is alive and healthy

Present pregnancy: spontaneous conception,
ML _ 1 and half year, Non compaction myocardium [NCM]

Upon admission

i.e [on 1/ aug/22] physical examination is done, her vitals were found to be pulse rate _90/min, BP_100/6 mmhg, Temperature _98F, heart rate _ 90/min, RR _22/min, spo2 _98%

Also pt's acute GE was resolved, no abnormalities were detected in gastro intestinal system

On the day prior to delivery , patient was kept under observation, nothing by mouth [NBM] orders were given from 12 ;00 AM, vitals were continuously monitored , CTG monitoring was done , FHR monitoring was done,
TAB. DEPINE 20 MG stat, TAB. DEPINE 10mg TID given

On the day of delivery,

Pre _ procedure vitals were monitored, T- 97F, BP_ 120/60mmhg,PR : 64/min,RR_20/min, spo2 : 96% , P/A _uterus term sized, cephalic, relaxed, FHS+ , L/E _ No bleeding ,w/f pain in abdomen ,bleeding pv , CTG monitoring was done _ showed mild contractions, NBM_ IV fluids given at rate of 100cc/hr , shifted to OT on time , continued TAB . DEPINE 10 MG TID, TAB CEFUM 250 MG BD advised.

Attenders and patient counselled regarding prognosis and proceeded for LSCS on patient request

Vitals stabilized, Preoperative medication was given, shifted to OT ,NBM , and advised for foley catheter

Elective LSCS was done under spinal anesthesia__0.5% bupivacaine heavy was chosen, under aseptic condition abdomen painted and draped , pfannensteil incision was given , abdomen opened in layers, UV fold identified and opened , bladder pushed down , curvilinear incision given over LUS , delivered the baby , cord clamped and cut , cord blood collected, baby handed over to pediatrician , placenta and membranes were removed by controlled cord traction , uterus was well retracted , no PPH , no angle extension uterine incision was closed in 2 layers , hemostasis is being achieved ,mops

and instruments are being checked and counted, abdomen closed in layers, patient withstood the procedure well

Findings: uterus – has no anomalies, LUS _ well formed , liquor_ clear, slightly excess, delivered a single, live , term, male baby by PPVX aided by forceps on 2/8/2022 at 1;33 pm , birth weight was found to be 2 kg, cried immediately after birth , cord clamped cut , cord blood collected, handed to pediatrician ,APGAR score : 8/10, 9/10 at 1, 5 mins respectively

Placenta: posterior, extending into LUS

B/L Adnexa _normal

Post procedure:

Vitals were stable

B/L Breast_ soft ,non tender , breast feeding +

P/A_ soft , BS+ , uterus retracted well

L/E _minimal bleeding PV

Bed ambulation started, encouraged patient for breast feeding ,Adequate hydration maintained, vitals being monitored , TAB MISOPROSTOL200mg given , foley removed , advised soft diet.

IV antibiotics given post operation For 48 hrs followed by oral antibiotics

IV Antibiotics given are:

JONAC suppository – I tab ,iv

Inj. PERINORM 1 amp ,iv

JUSTIN suppository 1tab, iv

DUCOLAX suppository ,iv

Inj. PAN 40 mg , iv, OD

Inj. TRAMADOL, 50 mg , IV, SOS

Inj.PCM ,I gm ,IV, TID

Oral antibiotics given are:

TAB. CEFTUM 250 mg/PO/BD

TAB. MONOCEF 1GM /PO/BD

TAB. CEFKIND/250MG/PO/BD

TAB. MISOPROSTOL

TAB . DOLO 650mg / PO /TID

Foleys removed on IPOD, wound dressing done 2 POD, wound healthy

Patient was discharged in stable condition .

Discharge advice;

NORMAL DIET

TAB CEFKIND 250 MG, BD ,FOR 5 DAYS ,9AM TO 9PM

TAB PAN 40 MG ,OD, FOR 5 DAYS, BBF

TAB DOLO 650 MG TID, FOR 5 DAYS

TAB. FERRONOMIC PKUS, OD , FOR 90 DAYS, POST LUNCH
AT 3 PM

TAB . SHELICAL XT ,OD FOR 6 MONTHS

TAB . INTOTO WOMAN OD

TAB ENZOFLAM CT TID FOR 15 DAYS

TAB MICRO –D3 ONCE/WEEK

MICRO MOM PROTEIN POWDER IN MILK , BD , 2 TBSP FOR 3 MONTHS

SYRUP DUPHALAC 15ML SOS

Exclusive breast feeding for 6 months , breast hygiene need to be maintained and regular immunisation of the baby is mandatory.

Review in gynaec opd In one week.

Discussion:

The incidence of placenta previa has increased to 3\1000 deliveries in the past decade. The diagnosis of placenta previa is made by ultrasound. In recent years the MRI has come into use. Despite the early diagnosis of placenta previa, hysterectomy remains the most common surgical procedure in case of PPH. We report on a successful outcome of our conservative surgical protocol (C-section) in a case at a high risk of PPH for placenta previa. In this case there is no vaginal bleeding observed so there was less risk and PPH didn't take place. There was normal vaginal bleeding and no other risks were observed. The patient was healthy and discharged.

Conclusion:

In conclusion, when there is high risk for hemorrhage the conservative methods are considered as better options in the management of critical cases of pregnancy (placenta previa).

Often, women are encouraged to have a cesarean birth if they are at high risk for hemorrhage because it might be safer for the baby. But a vaginal birth is still an option in the right circumstances, such as: no other issues that would suggest a vaginal birth is unsafe, such as placenta previa.

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