

Management of Woman with Placenta Accreta



Prof. Radha Ranabhat,

TUIOM Nursing Campus, Maharajgun

Abstract

A placenta accreta is an abnormally invasive implantation of the placenta into the uterine wall. It occurs when the chorionic villi invade into the myometrium. This condition affects 1 in 2500 pregnancies (ACOG, 2002). Its risk factors include advanced maternal age and history of previous cesarean deliveries. (De, LM. 2004) There has been an increase in incidence of placenta accrete in recent year probably most likely due to recent increases in cesarean deliveries. The deep adherence of the placenta makes it difficult to detach, which puts the mother at high risk for hemorrhage during delivery. For this reason, placenta accreta may require in a hysterectomy. Sonography is used as a screening image the fetus and placenta; however, magnetic resonance imaging (MRI) often used when placenta accreta is suspected because it can help differentiate the specific type of invasive placental implantation. Prenatal diagnosis can help health care professionals prepare for the expected complications during delivery, thereby reducing morbidity and mortality of the mother.

Intruduction

Mrs Rai, 17 years old, married woman was admitted in a maternity hospital, kathmandu Nepal with the history of delivery a full term female alive baby at home before 15 days and

the placenta not yet delivered. On arrival, her general condition was poor and looked pale. On examination, sclera, mucous membrane and tongue were pale, B.P 80/50 mmHg, Pulse 100/m, Respiration 24/m, Temperature 100 degree Fahrenheit and on abdominal palpation uterus was 18-20 weeks, 1st degree perineal tear was found. Her hemoglobin level was only 3.2gm. She was admitted in maternal intensive care unit (MICU). All conservative treatments including blood transfusion (7pint), intravenous transfusion solution injection oxytocin 10 unit added in infusion and 5 unit IM was given. Her general condition was improved, hemoglobin level was increased to 10gm and she was treated with Intravenous Metronidazole, (Metronidazole is an antibiotic especially effective against anaerobic infections), intravenous Taxime 10gm (taxime is a cephalosporin antibiotic used to treat bacterial infection) and one ampoule of methotrexate (antiproliferative and immunosuppressive agent) intramuscular and other conservative treatments were given. Intermittent lower abdominal pain and slightly dark red vaginal bleeding was continued.

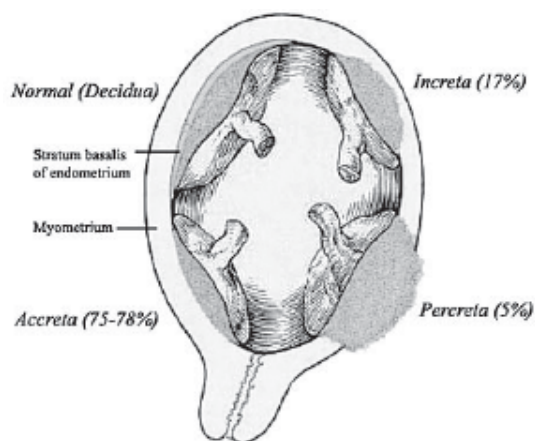
Manual removal of placenta (MRP) was tried, but couldn't succeed and only 30 gms of placental tissues could be removed. Still a

plenty of placental tissues remained inside the uterine cavity. Injection methotrexate 1 ampule was given than oral tablet was given BD for 3 days. After 20 days of admission, there was profuse vaginal bleeding of about 400ml. Immediately she was taken to operation theatre for another attempt of MRP. Before performing MRP, the size of uterus was about 18 weeks and foul smelling discharge was present. Doctor performed vaginal examination and MRP was done. This time MRP was successful and whole placenta was removed. This was followed by gently gentle curettage and vaginal packing of the uterine cavity. Then patient was transferred to postnatal ward and 2 pints of blood was transfused (total 9pints). Patient's general condition improved gradually. In the same day vaginal packing was removed. Mrs was a case of placenta accrete successfully treated with IV methotrexate. After two weeks of treatment, no signs of placenta could be visualize on ultrasound examination of the uterus. Treatment with methotrexate is to destroy the still attached tissue is beneficial to women with placenta accrete. But the evidence of exact mechanism is lacking in various studies.

Then she was discharged after 35 days of hospitalization. Before discharge, discharge planning was done, Discharge teaching on personal hygiene, breast feeding, immunization, nutrition, family planning activities, rest and awareness of danger sign of post natal period was given to her. if possible, she should not pregnant again, otherwise she should not conceive at least 3 years because there might be the possibility of recurrence such type of problem again.

Placental implantation

During a normal pregnancy the placenta attaches to the uterine wall, however there is a condition which may occur if the placenta attaches itself too deeply into the wall of the uterus. This attachment may be of three kinds namely placenta accreta, placenta increta, and placenta percreta. According to severity and depth of placenta attachment to uterus wall (see figure 1)



Placenta Accreta occurs when the placenta attaches deep in the uterine wall but it does not penetrate the uterine muscle. This is the most common type accounting for approximately 78% of all cases.

Placenta Increta occurs when the placenta attaches even deeper into the uterine wall and penetrates into the uterine muscle. This accounts for approximately 17% of all cases.

Placenta Percreta occurs when the placenta penetrates through the entire uterine wall and attaches to another organ such as the bladder. This is the least common of the three conditions accounting for approximately 5% of all cases.

Type of placenta implantation (figure 1) Incidence

The incidence of placenta accreta has increased 10-fold in the past 50 years. During the period from 1930 to 1950 the incidence was one case in 30,000 deliveries. By 1980 one in 7,000 incidence has now risen to one in 2,500 deliveries.

Causes of placenta accreta

The specific cause of placenta accreta is unknown, various risk factors has been identify as predisposing to it. A cesarean delivery increases the possibility of a future placenta accreta, history of cesarean delivery are present in over 60% of placenta accreta cases.

The common risk factors include anything that may cause scarring of the endometrial cavity which includes:

1. History of cesarean delivery
2. Placenta previa with or without previous uterine surgery
3. Previous myomectomy and previous D and C (dilatation and curettage) operation
4. Asherman's syndrome: also called "uterine synechiae" or intrauterine adhesions (IUA), a condition characterized by presence of adhesions &/or fibrosis within uterine cavity due to scars.
5. Submucous Leiomyomata: benign smooth muscle tumors of the uterus. Frequent in women older than 30 years of age, very rare in woman below the age of 18, and tend to regress after menopause. Most common pelvic tumors in women.

6. Maternal age of 35 years and older.
7. Absence of deciduas basalis or absence of Nitabuch's fibrinoid layer.

All above causes and risk factors were not relevant to this patient. it was suspected that she might have the absence of desidua basalis or absence of Nitabush's fibrinoid layer, but confirmed diagnosis was not made.

Complications

On fetus

The most significant risk to the baby is prematurity. Nearly two-thirds of babies born to mothers with placenta accreta are born prematurely, usually between the 34th and 35th week of pregnancy but Mrs Rai had delivered a full term female baby at home.

On mother

The placenta usually has difficulty in separating from the uterine wall. The primary concern for the mother is hemorrhaging during manual attempts to detach the placenta. Severe haemorrhaging can be life threatening. Other concerns involve damage to the uterus or other organs (as in percreta) during removal of the placenta. Hysterectomy is a common therapeutic intervention needed that will hinder the women to have further children. Additional complications include retained waste products and uterine rupture. Uterine rupture is especially common in cases of placenta increta and percreta.

Signs and Symptoms

There may be some vaginal bleeding during the third trimester.

Abnormal elevations in [beta]-hCG and maternal alpha-fetoprotein may be found in the second trimester.

Hemorrhage during delivery is the commonest finding because the placenta does not separating out from the uterine wall. Additional complications include retained waste products and uterine rupture. Uterine rupture is especially common in cases of placenta increta and percreta.

The risk of maternal and fetal complications increases notably after the 35th week exceeding 90% after the 36th week of gestation as associated with the degree of invasion.

Diagnosis

Placenta accreta is very rarely recognised before birth, and is very difficult to diagnose. A Doppler ultrasound can lead to the diagnosis of a suspected accreta and MRI can give more detail information leading to further suspicion of such an abnormal placenta. It can lead to some vaginal bleeding during the third trimester in some cases. During birth, placenta accreta is suspected if the placenta has not been delivered within 30 minutes of the birth. Mrs. Rai was admitted with the history of delivery 15 days back and continued some vaginal bleeding and retained placenta so it suspected as the placenta accrete.

Management of woman with placenta accrete

The safest treatment is a planned caesarian section and abdominal hysterectomy if placenta accreta is diagnosed before birth.

If it is important to save the woman's uterus (for future pregnancies) then resection around the placenta may be successful.

Conservative treatment can also be uterus sparing but may not be as successful and has a higher risk of complications.

Therapeutic management

1. In case of partial placental accrete (focal): remove the tissue as much as possible; provide oxytocics to maintain contraction of uterus and hemostasis and if fail to contract the uterus, hysterectomy is done in multiparous women.
2. In case of total placental accrete: hysterectomy is done in parous women. In case of desire to child bearing, cutting of umbilical cord as close to its base as possible and leaving behind placenta which is expected to be autolyzed in due course of time.
3. Antibiotics are administered to prevent infection.
4. In rare case of placenta accrete, it may invade the bladder. In such cases patients may need hysterectomy and Methotrexate. Methotrexate, has been proposed as a conservative treatment for placenta accreta. Methotrexate acts primarily against rapidly dividing cells and therefore is effective against proliferating trophoblast. However, others have argued that, after delivery of the fetus, the placenta is no longer dividing and therefore methotrexate is of no value. The use of methotrexate did not prevent delayed hemorrhage. There are no large studies

which have compared methotrexate with no methotrexate in the treatment of placenta accreta. Therefore, at the present time, there is no convincing data for or against the use of methotrexate for accreta.

Nursing Management

Obtain a detailed obstetric history including previous surgery on uterus.

For clients taking Methotrexate, instruct the woman to increase fluid intake to at least 2 Litre each day as uric acid formation is increased with the drug use.

Provide emotional support to the woman and family.

Conclusion

Placenta accreta is a rare but serious obstetrical complication that can be life threatening for both mother and baby. It can be identified by imaging modalities that include sonography and MRI. It is very important to diagnose prenatally to prepare for delivery complications such as uterine rupture and severe hemorrhage. Clinicians should be aware of the risk factors and imaging features associated with

this condition so that they can provide the best care for the patient.

References

American College of Obstetrics and Gynecologists(ACDG)(2002). *Placenta accreta*. ACOG Committee Opinion No. 266. *Obstet Gynecol.*;99:167-170.

De Lange M, & Rouse GA.(2004). *An Illustrated Review*. Ob/Gyn Sonography Pasadena, Calif: Davies Publishing Inc.

Hanson M (1998). *Pathophysiology*; Foundation of disease and clinical management. First edition London.

Moon MA. (2006). OB/GYN News: *Ultrasound helps predict placenta accreta*. Retrieved on March, 15, 2011 from www.findarticles.com/p/articles/mi_m0CYD/is_23_39/ai_n8581175/print. Accessed October 10,

Usta I,, Hobeika E, Musa A, Gabriel G, & Nassar A.(2005). Placenta previa-accreta: risk factors and complications. *American Journal of Obstetrics and Gynecology*. 193(3), 1045-1049.

