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Case Report

PLACENTA ACCRETA AND ITS SURGICAL MANAGEMENT: A CASE REPORT

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INTRODUCTION

Placenta accreta is defined as abnormal trophoblast invasion of part or all of the placenta into the myometrium of the uterine wall[1]. Placenta accreta remains a major cause of severe and life-threatening post-partum haemorrhage, which often requires peripartum hysterectomy[2].

According to the WHO systematic analysis published in THE LANCET in 2014, post-partum haemorrhage, which accounts for 27.1% of all maternal deaths worldwide, is the leading cause of maternal deaths[3], and abnormally invasive placenta is the second most common cause of PPH (24.8%, with the leading cause being uterine atony, 38.3%)[4].

NOVELTY OF THE CASE

Though this case is not some kind of new or unknown case, but it comes under obstetric emergency and managing it was indeed very difficult. It was one of the most challenging cases I have faced in my PG life. I chose this case because I want to learn about and improve my management skills in such obstetric emergencies

CASE

Fulkumari Devi, 24 years old, 2nd gravida (G_2P_1) mother from Hazinagar, attended ER on 3/12/22 at 8 am with chief complaint of bleeding per vagina since early morning with lower abdominal pain in her 37th week of pregnancy. The bleeding was bright red colour and moderate in amount.

She was married for last 5 years and had a child delivered by LSCS 2 years ago. This time she had spontaneous conception pregnancy confirmed by
UPT at 8th week. It was a booked case of JNM with regular antenatal visit. Her LMP was 17/3/2022, and EDD was 24/12/22. Upon current admission, estimated gestational age by LMP was found to be 37 weeks, and calculating from 1st trimester USG, the gestational age was 38 weeks 1 day.

Her first trimester went uneventful. There was no history of excessive nausea or vomiting, nor any spotting per vagina.

During second trimester, she felt quickening at 5th month of gestational age. In this trimester also there was no history of bleeding P/V. Anomaly scan was not done. She took Inj. TT at 16th and 20th week of gestational age.

On her third trimester, she was diagnosed as a case of placenta previa at 30th week of gestational age. She was advised to take complete bed rest. During this period, she was admitted twice at 30th week and 35th week with complain of mild per vaginal bleeding and was discharged within 7days after conservative management.

Her menstruation began at the age of 14years. She used to have regular menstrual cycle where bleeding lasting for 4-5days every 28 days, moderate flow with dysmenorrhea.

Nothing significant was found in her medical and family history. Her surgical history was also not significant except 1 LSCS 2 years ago.

On general physical examination, patient was alert, conscious and cooperative. She was moderately built and nourished, her height was 156cm and weight was measured 68kg. On examination, she had mild pallor. No icterus, cyanosis, clubbing or bilateral pitting pedal edema was seen. Neck veins and glands were not enlarged. Her breasts were normal and thyroid was not enlarged.
Pulse rate was found to be 82 beats per minute, with regular rhythm and normal volume. Her blood pressure was 128/82 mm of Hg, oxygen saturation 99%, respiratory rate 14/min and temperature was 98.8^{o}F.

On neurological examination, no focal neurological deficit was found. On cardiovascular examination, S1 and S2 was audible, and no murmur was heard on auscultation. On auscultation of the lungs, vesicular breath sounds were heard on bilateral lung fields. Examination of GI system was within normal limit.

Coming to the obstetric examination, on inspection, her abdomen was ovoid in shape, linea nigra and striae gravidarum was present. A lower abdominal scar mark of previous LSCS was also observed. There was no venous prominence.

On palpation, her uterus was term size, non-tender on palpation, fetal movement present and FHR was found to be 136 beats per minute. Her liquor was adequate. During P/V examination, per speculum examination showed os 1 cm dilated with mild bleeding red in colour coming out from os. Digital per vaginal examination was not done, because PV examination is preferably not to be done in a known case of placenta previa, except inside an OT set-up.

DIAGNOSIS

Keeping in mind the history of previous LSCS 2 years back and reddish per vaginal bleeding, the radiologist of the institution was consulted in the presence of the obstetrician. USG was done which denoted that placenta anterior, low-lying, completely covering the internal os, implying placenta previa grade-III.

This radiologically confirmed the diagnosis of post-CS pregnancy with central placenta previa. Immediately Em LUCS was planned after USG.

Colour doppler was not advised along with USG, so placenta accreta cannot be diagnosed preoperatively. The diagnosis of placenta accreta was made based on OT findings, and later on confirmed by histopathological examination of the resected uterus following hysterectomy.

INVESTIGATIONS

Hb = 8.6; PCV-23.8%; RBS-108mg/dl

RFT: Urea-24mg/dl; Creatinine-0.5 mg/dl; Uric acid-34 mg/dl

LFT: Total Bilirubin-0.5 mg/dl, Direct Bilirubin-0.2 mg/dl, Indirect bilirubin-0.3 mg/dl.
SGOT- 19 mg/dl; SGPT- 18 mg/dl; GGT- 20
Total Protein- 7 g/dl, Albumin-5 g/dl,
Globulin- 1.2 g/dl

SEROLOGY:
HIV-N/R; HbsAg-Negative; VDRL-N/R

COAGULATION PROFILE:
BT -1'40"; CT- 3'15"; Platelet-2.25 lakh/mm^3
PT-11Sec; APTT-26sec; INR-1.2

USG (3/12/22):

Single live fetus of 38 weeks 4 days in cephalic presentation, longitudinal lie.
Placenta placed anteriorly, low lying, completely covering internal os, implying placenta previa grade-III of grade 2 maturity.
FHB- 155/min
Fetal weight-3500gm
Liquor- Adequate, AFI-12cm

OT PROCEDURE

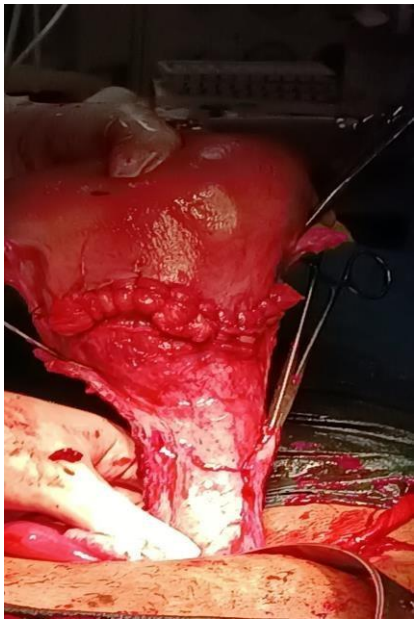
Preparation:

2-unit PRBC was arranged and 2-unit blood requisition was done. High risk party counselling was done.

Total abdominal hysterectomy consent was taken.

Procedure:

Em LSCS was done with bilateral internal iliac artery ligation followed by total obstetric hysterectomy under spinal anaesthesia.



STEPS OF OPERATION:

Spinal Anaesthesia given

⬇

ASS and ASD given

⬇

Patient placed in Supine Position

⬇

Lower transverse skin incision was made over skin

⬇

Abdomen opened in layers

⬇

Lower transverse incision was made over uterus

⬇

Baby delivered and cried at birth

⬇

Placenta removed manually

⬇

Some bits of placenta adhered with lower segment of uterus after manual removal of placenta.

⬇

Profuse bleeding from lower segment (approx. 1.5 lit)

⬇

uterus closed in two layers quickly

⬇

Bilateral internal iliac artery ligation done

⬇

Devascularization of uterus done and local haemostatic sutures given

⬇

Compression sutures given

⬇

Haemostasis could not be achieved

⬇

Total abdominal hysterectomy done

⬇

Vault closed

⬇

Haemostasis secured

⬇

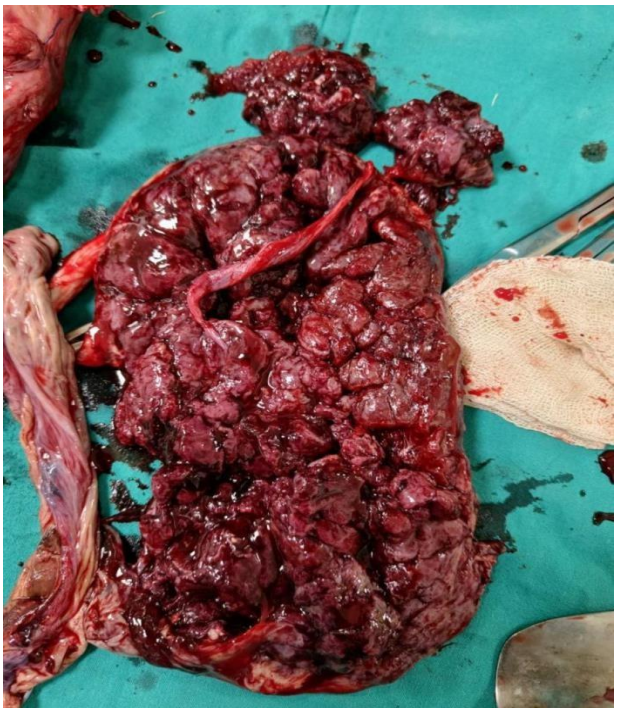
Peritoneal washing done and peritoneal suction drain given and placed in POD.

⬇

Specimen of uterus and placenta sent for HPE

⬇

Intra operatively 2unit of PRBC was transfused.



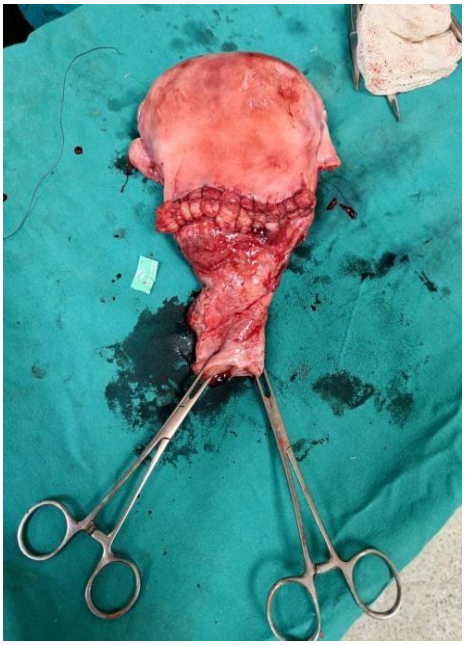
OT FINDINGS

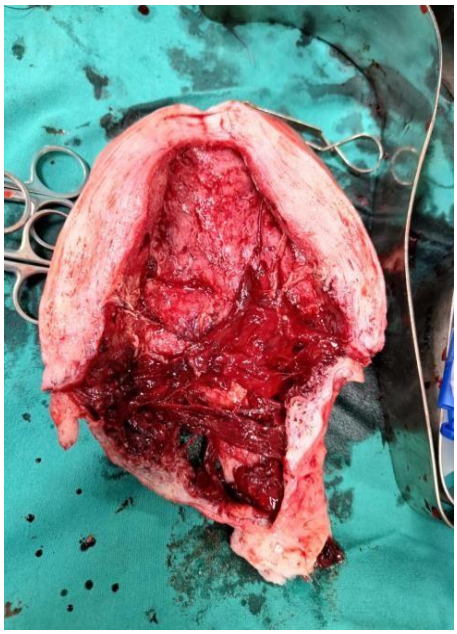
There was no adhesion seen between uterus and other adjacent structures. Bilateral ovaries were found to be normal.

There were engorged blood vessels near the lower uterine portion, signifying neo-vascularisation. Profuse bleeding from lower uterine segment was seen. Also, there were some

retained bits of placenta adhered to lower uterine segment.

Intraoperative blood loss was almost 1.2 litres.





POST-OPERATIVE FOLLOW-UP

IMMEDIATE POST-OPERATIVE EVENTS

- No per vaginal bleeding was noted after operation.
- Packed Red Blood Cells (PRBCs), Fresh Frozen Plasma (FFPs) and Platelets were transfused in 1:1:1 ratio.
- Vitals were stable, urine output was adequate and clear, and there were no signs of abdominal distension.

POST-OPERATIVE FOLLOW UP

- During post-operative period, initially she was advised NPM (nothing per mouth) and IV fluid (IVF RL: DNS 1:1 @ 6 hourly), with proper antibiotics (Ceftriaxone + Metronidazole) and other conservative therapies (PPI, anti-emetic, analgesic etc.)
- Her post-operative follow-up remained uneventful. Liquid diet was allowed 24hrs after the surgery, with IPS being clearly audible. Gradually IV fluid was omitted and patient was shifted to oral drugs after omitting injectables. After 48 hours of the surgery, patient was able to tolerate normal diet and passed urine and stool normally.
- On investigations, her haemoglobin level was found to be 10.2 g/dl, total count 10,400/mm^3 and platelet count was 2.26 lakh/mm^3 after transfusion of PRBC, FFP and platelet.
- PV examinations were performed on a regular basis to rule out any per vaginal bleeding that might arise suspicion of any retained products of conceptus. No such PV bleeding was found.
- Regular dressing was done and the wound remained healthy. The patient was discharged on day 14 and she was advised to maintain outdoor-basis follow-up, once per week for first 6 weeks.
- HISTOPATHOLOGY REPORT of the sent specimen was obtained from her during her first post-op OPD visit that showed evidence of placental invasion inside myometrium, signifying placenta accrete.

COUNSELLING

Patient was counselled about the hysterectomy and its consequences i.e., surgical menopause, and explained properly about the symptoms of surgical menopause such as hot flushes, dryness of vagina, mood swings etc.

DISCUSSION

Placenta accreta characterised by abnormally

implanted, invasive or adhered placenta. The major clinical problem is placental failure to separate normally from the myometrium after fetal delivery because of absence of decidua basalis.

If not managed on time, it can cause significant morbidity and mortality [4]. Preoperative assessment ideally begins once recognised antenatally. A major decision concerns the timing and ideal facility for delivery. After fetal delivery the extent of placental invasion is assess without attempts of manual placental removal.

It is evident that chance of bleeding can be reduced by bilateral internal iliac artery ligation before attempting hysterectomy [5].

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