International Journal of Clinical Obstetrics and Gynaecology

ISSN (P): 2522-6614
ISSN (E): 2522-6622

www.gynaecologyjournal.com
2018; 2(5): 170-171
Received: 22-07-2018
Accepted: 25-08-2018

Dr. Anandita
Senior Resident, Department of Obstetrics and Gynaecology, Ggsgh, New Delhi, India

Dr. M Mani
Incharge, Department of Obstetrics and Gynaecology, Ggsgh, New Delhi, India

Dr. Anupam Nidhi
Dept. Obstetrics and Gynaecology, Ggsgh, New Delhi, India

Correspondence
Dr. Anandita
Senior Resident, Department of Obstetrics and Gynaecology, Ggsgh, New Delhi, India

Couvelaire uterus with concealed abruptio placenta: A case report

Dr. Anandita, Dr. M Mani and Dr. Anupam Nidhi

Abstract
Couvelaire uterus or uteroplacental apoplexy is a severe form of abruption where there is widespread extravasation of blood into the uterine musculature and beneath the serosa. It is one of the complication of abruption placentae in which myometrial wall is infiltrated by blood leading to classic ecchymotic uterus appearance. In our case, there was concealed abruption placentae with no significant predisposing factor being revealed in history. Preoperatively, there was retroplacental clot with couvelaire uterus but with no post operative complication.

Keywords: Couvelaire uterus, abruption placentae, uteroplacental apoplexy, ecchymotic uterus and retroplacental clot

Introduction
Couvelaire uterus or uteroplacental apoplexy is a severe form of abruption where there is widespread extravasation of blood into the uterine musculature and beneath the serosa. Incidences of hemoperitoneum caused due to abruption with seepage of blood through the fallopian tube have also been reported [1]. Couvelaire was the first to describe this as a pathological entity in 1912. It is a syndrome that can only be diagnosed by direct visualization or biopsy (or both). For this reason, its occurrence is perhaps underreported and underestimated in the literature [2].

Abruptio placentae is defined as the premature separation of partial or complete placenta after 20 weeks of gestation any time before the delivery of the fetus. Abruptio placenta is an important cause of maternal and perinatal mortality and morbidity globally especially in developing countries.

Abruption can either be revealed or concealed with bleeding seen per vaginum or as a retroplacental clot.

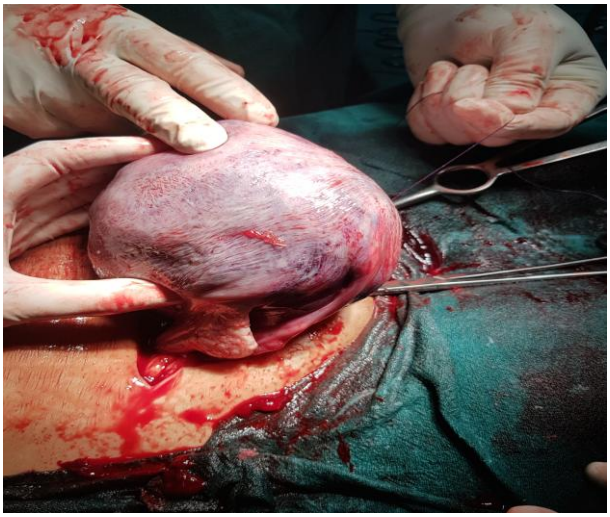
Case Report
A 24 year old woman G2P1L1 with previous normal vaginal delivery 3 years back with 36 weeks of amenorrhoea was referred from maternity home for Non Stress Test. Patient gave no history trauma. On examination, she was afebrile with blood pressure 110/60 mmHg in supine position in left upper limb, heart rate 100 beats per minute and respiratory rate was 18 per minute. She had only blood group report with her. On examination her fundal height was corresponding to the period of gestation with cephalic presentation and her uterus was irritable with non stress test showing fetal decelerations (upto 60 beats per minute).

On per vaginal examination, cervical os was admitting tip of finger, posterior, uneffaced.

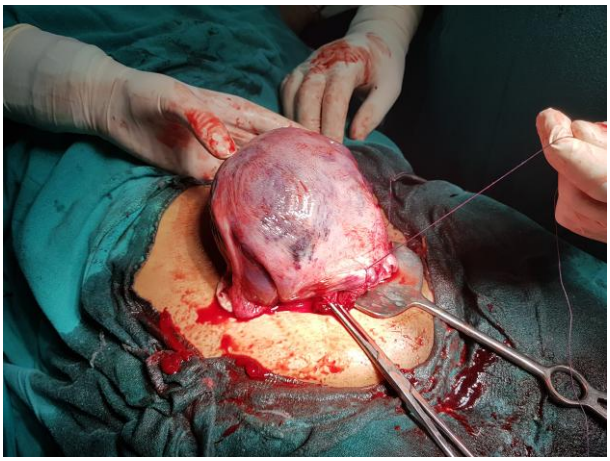
In view of significant and persistant decelerations, she was taken up for emergency cesarean section with due high risk consent and with her pre-operative haemoglobin 8.7 g/dl, with total platelet count of 160000. Blood was crossmatched and arranged.

A male child weighing 2.1 kg was delivered. Baby cried immediately after birth. Liquor was clear and adequate. Cord length was adequate. A retroplacental clot with estimated blood loss of about 1 litre was noted and the uterus was found to have dark purple patches with ecchymosis diagnostic of couvelaire uterus. She was transfused one unit packed cells in post operative period.

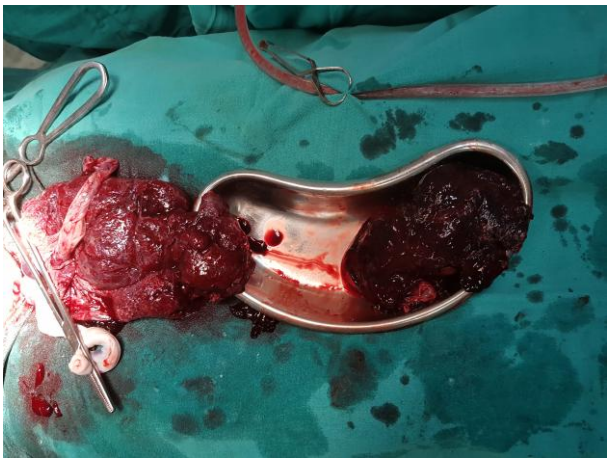
She was shifted to HDU for observation and given injectable antibiotics for 5 days. Her Post operative stay was uneventful and there was no PPH.



Posterior surface of uterus



Anterior surface of uterus



Placenta with retroplacental clot

Discussion

Placental abruption complicates approximately 1 in 100 to 120 pregnancies [3, 4] with two-thirds classified as severe based on associated maternal, fetal, and neonatal morbidity [5]. The exact etiology of placental abruption is unknown. Risk factors are smoking, cocaine use during pregnancy, maternal age over 35 years, hypertension, placental abruption in a prior pregnancy, multiple gestation pregnancies, polyhydramnios, preeclampsia, sudden uterine decompression, short umbilical cord and trauma to the abdomen such as a motor vehicle accident, fall or violence resulting in a blow to the abdomen [6]. Abruptio placenta can present the uterus with myometrial wall infiltrated by blood and classic ecchymotic uterus appearance, dark in color, and as serious consequence-es. As the result of this infiltration of blood into the myometrium, the organ loses its contractile force be-coming static and possibly increasing bleeding, characterizing the Couvelaire uterus. The uterus should be evacuated and contractions should be stimulated using intravenous oxytocin; hysterectomy (the removal of the uterus) may be needed in some cases. Following Complications can occur with abruptio placentae

1. Maternal blood loss that may result in hemodynamic instability, with or without shock, and/or disseminated intravascular coagulation (DIC)
2. Fetal compromise (eg, fetal distress, death) or, if abruptio placentae is chronic (usually), growth restriction
3. Sometimes fetomaternal transfusion and alloimmunization (eg, due to Rh sensitization).

The fetus may be compromised if there is prolonged delivery because of the non-contractile uterus; severe bleeding may cause hypovolemic shock in the mother [7].

In our case report, patient gave no history of trauma and her blood pressure was with in normal range, she had fetal decelerations on NST with relaxed uterus. Despite all these findings one should keep abruptio placentae as differential diagnosis in mind.

References

1. Bertholdt C, Vincent-Rohfritsch A, Tsatsaris V, Goffinet F. Placental Abruption Revealed by Hemoperitoneum: A Case Report. Am J Perinatol Rep. 2016; 6(4):e424-e426.
2. Donaldson IA, Bismillah AH. Life from a Couvelaire Uterus. Postgrad Med J. 1963; 39(452):356-8.
3. Ananth CV, Keyes KM, Hamilton A, *et al*. An international contrast of rates of placental abruption: an age-period-cohort analysis. PLoS One. 2015; 10:e0125246.
4. Ruiter L, Ravelli AC, de Graaf IM, *et al*. Incidence and recurrence rate of placental abruption: a longitudinal linked national cohort study in the Netherlands. Am J Obstet Gynecol. 2015; 213:573.e1.
5. Ananth CV, Lavery JA, Vintzileos AM, *et al*. Severe placental abruption: clinical definition and associations with maternal complications. Am J Obstet Gynecol. 2016; 214:272.e1.
6. Schmidt P, Raines D, Dulebohn S, Gossman W. Placental Abruption (Abruptio Placentae). Stat Pearls, 2018, 25.
7. Hubbard JL, Hosmer SB. Couvelaire uterus. J Am Osteopath As-Soc. 1997; 97(9):536-7.