International Journal of Clinical Obstetrics and Gynaecology

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

www.gynaecologyjournal.com
2020; 4(5): 90-92
Received: 18-06-2020
Accepted: 26-07-2020

Dr. Bhoomika Jain
MBBS, Junior Resident, Department of Obstetrics and Gynaecology MGM Medical College and Research Centre, Navi Mumbai, Maharashtra, India

Dr. Rahul Khatri
MBBS, Junior Resident, Department of Obstetrics and Gynaecology MGM Medical College and Research Centre, Navi Mumbai, Maharashtra, India

Dr. S Sharma
MBBS, MD OBGY, Professor, Department of Obstetrics and Gynecology MGM Medical College and Research Centre, Navi Mumbai, Maharashtra, India

Dr. S Kumar
MBBS, MD OBGY, Professor and HOD, Department of Obstetrics and Gynecology, MGM Medical College and Research Centre, Navi Mumbai, Maharashtra, India

Corresponding Author:
Dr. Rahul Khatri
MBBS, Junior Resident, Department of obstetrics and Gynaecology MGM Medical College and Research Centre, Navi Mumbai, Maharashtra, India

Placental abruption at 18 weeks of pregnancy leading to Couvelaire uterus: A rare case

Dr. Bhoomika Jain, Dr. Rahul Khatri, Dr. S Sharma and Dr. S Kumar

DOI: https://doi.org/10.33545/gynae.2020.v4.i5b.687

Abstract
Abruptio placenta is characterized by the premature separation of the placenta that occurs in about 1-2 per 100 pregnancies. It is a major obstetric complication associated with increased risk of fetal and maternal morbidity and mortality globally, especially in developing countries. Abruptio-placenta is commonly seen and diagnosed after 28 weeks of pregnancy. Here we present a case of abruptio placentae with couvelaire uterus at 18 weeks of gestation. The patient was initially managed conservatively but later was taken for Exploratory Laparotomy in view of unstable hemodynamics and profuse vaginal bleeding with history of previous caesarean section. The patient had profuse haemorrhage on hysterotomy which was controlled by B-Lynch suture.

Keywords: Abruptio placenta, Couvelaire uterus, utero-placental apoplexy, b-lynch suture

Introduction
Abruptio placenta is a serious obstetric complication which is characterised by the premature separation of placenta that occurs in about 1-2 per 100 pregnancies. The aetiology of abruption is unknown, but it occurs more among smokers, in hypertensive pregnancies, in pregnancies with intrauterine growth restriction, following trauma and in women with previous history of placental abruption. Multiple factors are known to be associated with increased risk of placental abruption like alcohol, cocaine use and nutritional deficiencies [1]. Abruptio placenta is known to occur mostly after 30 weeks of gestation with a mean gestational age of 34.01 weeks. Incidence of abruptio placenta is 2.12% in less than 25 weeks of gestation [2]. Couvelaire uterus or Utero-placental apoplexy is described in the setting of a gravid uterus with extravasations of blood into the uterine musculature to the depth of the uterine serosa with rare cases documenting hemorrhage extending to the broad ligaments and ovaries [1]. A Couvelaire uterus does not affect the uterine ability to contract and decompression usually allows constriction of spiral arteries to achieve hemostasis. A hysterectomy may be indicated as a life-saving measure if hemostasis cannot be achieved adequately in view of disseminated intravascular coagulopathy [3]. Here we present a rare case of abruptio - placentae at 18 weeks of gestation.

Case report
A 20 years old female gravida 2 Para 1 with previous Caesarean section (11 months ago) at 18 weeks of gestation came to the OPD with complaints of bleeding per vaginum since last 3 hours. No history of trauma, pregnancy induced hypertension in previous pregnancy. Her personal and family history was not significant. On General Examination, Pulse was 108/min, BP 130/80mmHg in sitting position. Mild pallor was present. Per abdomen her uterus was non-tender corresponding to 18-20 weeks size, fetal heart sounds were present. Per speculum Cervix and vagina were healthy. Bleeding per vaginum was present coming from the external os. On Per vaginal examination the cervix was tubular and cervical os was closed.
Since the patient was vitally stable and the fetal heart was present, a decision was made to manage the patient conservatively. An Ultrasound done showed a single live intrauterine pregnancy of 17weeks with a large 7*5*6 cm sized retro-placental clot. The placenta was anterior (Fig 1). On Investigation -Haemoglobin was 10.1gm%. Liver function test and renal function test were normal. BT, CT, Prothombin time INR, platelet count were within normal limit.

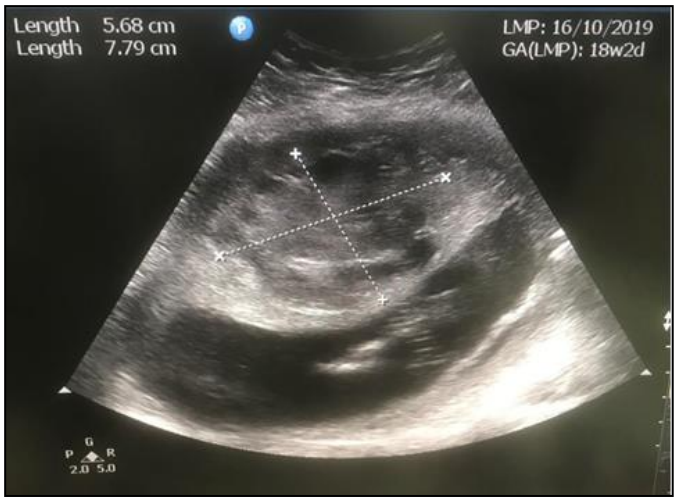

Fig 1: Ultrasonography suggestive of retro placental clot measuring 7*5*6cm

After 4-5 hours of admission, patient complained of severe pain in the abdomen. On examination, her Pulse rate-120/min and the BP was 90/70mmHg. On Per abdomen examination the uterus was about 20 weeks size and fetal heart sounds were absent. On Per speculum examination profuse bleeding was present with passage of clots. A decision for exploratory laparotomy was taken in view of tachycardia along with moderate to severe active vaginal bleeding.

Intraoperative finding: Couvelaire uterus seen (Figure 2). There was a small amount of blood in the peritoneal cavity. It was decided to do a hysterotomy. After taking an incision on the uterus, around 500gm of retro-placental clots were noted. (Figure 3) A fresh abortus weighing 230gms was delivered. (Figure 4) Uterotonics and vigorous uterine massage was done but the uterus remained atonic. Stepwise devascularization was done as the patient continued to have atonic postpartum haemorrhage. B Lynch haemostatic suture was taken and haemostasis achieved. Abdomen was closed in layers with an intraperitoneal drain left in situ. The patient was stable after administration of 2 pint of packed cell and 2 pints of fresh frozen plasma. The patient slowly improved maintaining hemodynamic stability and adequate urine output. She was discharged on post-operative day 7 with Haemoglobin of 9 gm%.

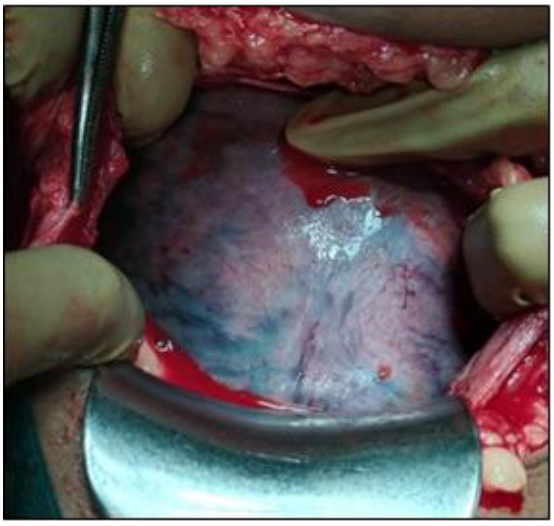

Fig 2: Couvelaire uterus

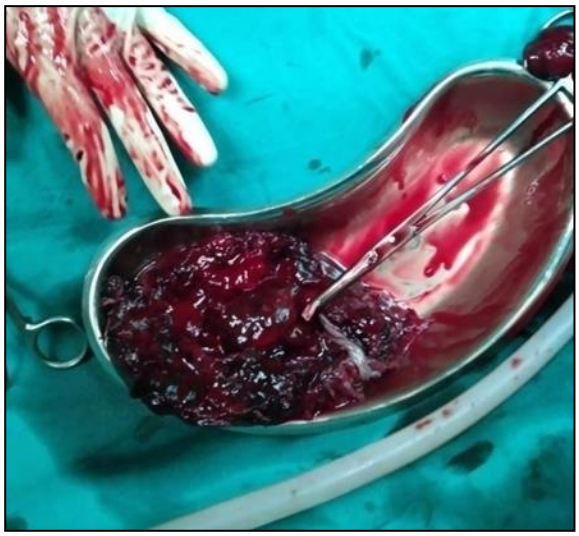

Fig 3: Retro placental clots

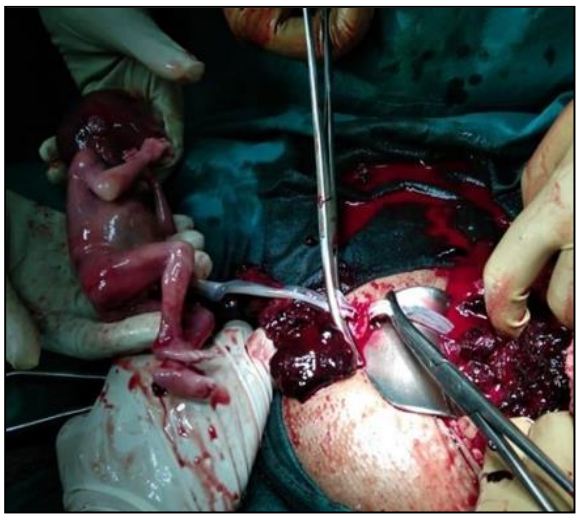

Fig 4: Fresh abortus delivered

Discussion

Abruptio placenta is characterized by the premature separation of the placenta that occurs in about 1-2 per 100 pregnancies [2]. It is a major obstetric complication associated with increased risk of fetal and maternal morbidity and mortality, especially in developing countries.

Abruption likely begins with disruption of spiral arteries to cause a retro placental hematoma. This can expand to disrupt more vessels and extend placental separation. Most women with placental abruption have sudden onset abdominal pain, vaginal bleeding and uterine contractions. Despite its clinical significance, there are no reliable diagnostic tests or biomarkers to predict or prevent the occurrence of abruption [4]. Complications include consumptive coagulopathy, hypovolemic shock, couvelaire uterus, acute kidney injury. Treatment of the woman with a placental abruption varies depending primarily on her clinical condition, gestational age and the amount of associated hemorrhage.

A major hazard to caesarean section is clinically significant consumptive coagulopathy if present.

With a living viable size fetus or when vaginal delivery is not imminent, emergency cesarean delivery may be chosen. In this case a decision for exploratory laparotomy was made despite an unviable fetus, in view of unstable hemodynamics and profuse vaginal bleeding.

Conclusion

The aim of this publication is to create awareness that abruptio placenta can occur in early pregnancy also and it could be life threatening too. In case of severe haemorrhage at hysterotomy, B-Lynch suture may be effective in controlling the haemorrhage.

References

1. Williams Obstetrics 25th edition, Obstetrical Hemorrhage 793-799
2. Shaifali Patil, Anup Kapse, Assessment of abruptio placentae cases in M.G.M healthcare institute, Kalamboli: A cross-sectional study, Indian Journal of Obstetrics and Gynaecology Research, July-September, Assessment of Abruptio placenta cases. 2018; 5(3):335-338.
3. Ming G, Lee W, Tan S. An Unusual Case of Placenta Abruption Leading to Couvelaire Uterus in a Previable Pregnancy. Journal of Medical Cases, North America, 11, apr. 2020.
4. Abasi J, Jeremiah I, Ekine AA. Risk factors and pregnancy outcome of placental abruption at the Niger delta university teaching hospital, okolobiri, south-south. Nigeria Br J Med Res. 2015; 5:1000-1100.