

Couvlaire Uterus – A Case Report



Medical Science

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ABSTRACT

Couvlaire uterus or placental apoplexy is a rare and non fatal complication of abruption placentae. At the time of cesarean delivery, it is not uncommon to find widespread extravasation of blood into the uterine musculature and beneath the serosa. It is named after Couvlaire, who in the early 1900s termed it uteroplacental apoplexy. We here present a case of 27 years lady with couvlaire uterus.

1.Introduction

Couvlaire uterus or placental apoplexy is a rare and non fatal complication of abruption placentae. At the time of cesarean delivery, it is not uncommon to find widespread extravasation of blood into the uterine musculature and beneath the serosa. It is named after Couvlaire, who in the early 1900s termed it *uteroplacental apoplexy*.

Effusions of blood are also seen beneath the tubal serosa, between the leaves of the broad ligaments, in the

substance of the ovaries, and free in the peritoneal cavity. These myometrial hemorrhages seldom cause uterine atony, and alone they are not an indication for hysterectomy.

Since it can be only diagnosed by direct visualization, its occurrence is perhaps under reported.

2 .Case report

A 27 years old lady G2P1+0 post CS at 30w2d with pre-eclampsia with complaint of headache and pain abdomen reported to labour room in the middle of night at 2.00am. On examination her BP was 160/120 with tense and tender abdomen.

2.1 General examination

BP-160/120
PR-84
Pallor ++
Pedal edema+

2.2 Per abdomen examination

Uterine size-34 weeks size, tense and tender abdomen
FHS could not be localized.

2.3 Per vaginum examination

Os-1.5 to 2 cm
Cervix-partially effaced
Membranes +
Station -high up

2.4 Laboratory investigations

Hb-6.5gm%
ABO/Rh-O positive
Platelet count-1.63lacs/mm3
BT-2min 30 secs
CT-6mins 30secs
PT- 15
INR-1
Appt-24
Serum uric acid-5.9gm%
Serum bilirubin-0.7mg/dl

SGOT-50.1U/L

SGPT-23.6U/L

KFT with serum electrolytes-normal limits

Urine albumin-++

2.5 Management-

After giving antibiotics, antihypertensive and blood transfusion, decision for emergency LSCS was taken as patients vitals were deteriorating.

2.6 Intra operative finding-

Ascites was noted

Couvlaire uterus was seen (fig1,2)



Fig1



Fig2

A dead female baby delivered by cephalic presentation.

Liquor blood stained.

Around 1500ml retroplacental clots seen.

2.7 Post operative management

2PRBC and 1 fresh frozen plasma transfused.

Vitals stabilize.

Antihypertensive labetalol 100 mg BD was continued to control BP.

After 5 days of observation patient was discharged with an advice to attend OPD weekly for BP monitoring.

3. Discussion

Couvlaire¹ first described the entity in 1911.

Originally it was thought to be caused by a toxin produced by placenta during abruption or caused by an obstruction to venous flow. However, the current etiology is because of placental abruption which may be caused by maternal abdominal trauma, but mostly it is related to the underlying process of chronic placental pathology.

Typical clinical features are abdominal pain, vaginal bleeding, tenderness of the uterus, often concurrent with hypertonic uterine contractions and non-reassuring FHR tracings. Possible maternal consequences are: obstetrical haemorrhage, emergency cesarean section, emergency hysterectomy, DIC and renal failure. A very rare complication is bleeding infiltrating the myometrium that results in condition called Couvelaire's uterus². It is a rare non-fatal complication of severe abruption^{2,3}. It is estimated to complicate 5% of all cases of abruption³. Haemorrhage from placental blood vessels seeps into deciduas basalis, it causes placental separation, followed by infiltration in the lateral portions of the uterus. Occasionally, the infiltrations reach the peritoneal cavity. It is important to emphasise that Couvelaire uterus is not always a result of placental abruption. A very recent case described by Shreedevi and colleagues presents a diagnosis of Couvelaire uterus in the absence of placental abruption and any other pathologies⁴. The entity is infrequently reported and the incidence is difficult to estimate because the diagnosis is made by direct visualisation or biopsy^{2,3}. Avery and Wells retrospectively describe the ultrasound findings in Couvelaire syndrome confirmed during cesarean section. Those findings are large retroplacental blood clot and blood dissecting into the myometrium. They state that ultrasound diagnosis of Couvelaire uterus is limited, but possible⁵. The myometrial hematoma present in couvelaire uterus does not interfere with contraction following delivery so is managed conservatively. Hysterectomy is not required and should be discouraged as the condition resolves spontaneously².

5. Conclusion

Proper antenatal checkups aiming at controlling high blood pressure will reduce the chances of abruption leading to reduction in incidence of Couvelaire uterus.

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