

# Report of Couvelaire Uterus without placental abruption

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## Abstract :

A case of Primigravida with 32 weeks of gestation with severe pre eclampsia & severe anemia with fetal distress having Couvelaire uterus without any evidence of abruption placentae or retro placental clots is reported.

**Key-words:** Couvelaire uterus, abruptio placentae

## Introduction:

Couvelaire Alexandre (1873–1948), French obstetrician. A leading specialist in obstetrics and gynecology, Couvelaire did original research on the anatomy of the pregnant uterus, uterine hemorrhages, and the pathology of newborn infants. In 1912 he published a work on the condition affecting the pregnant uterus that has been named after him. Extravasations of blood into the uterine musculature and beneath the uterine peritoneum in association with premature detachment of the placenta.

## Case report:

- Reporting a case of Primigravida aged 24 years residing from Huvinahadagali with amenorrhea of 8 lunar months & complaints of pain in the lower abdomen and bleeding per vagina about 14 hours prior to admission. She was appreciating fetal movements well. She was referred & admitted on 12/11/2013 at 4 am to Chigateri District Hospital labour room, Davangere
- Obstetric history—Married life-2yrs, NCM  
She conceived 1 yr after marriage; her pregnancy was confirmed at Ranebennur government hospital. 1<sup>st</sup> & 2<sup>nd</sup> Trimester was uneventful. She had last check up 1 week prior to admission in the same hospital. She was diagnosed as severe anemia with Hb of 6g% & was referred.
- Her menstrual cycles were regular  
LMP-11.3.13  
EDD -18.12.13 ( according to 9 wks usg, EDD was on 10.12.13, 19 wks usg -7.12.13 & 31 wks-26.12.13
- **On examination -**  
PR-88/m, **BP- 170/110mm Hg** with urine albumin 4 + Bilateral pedal oedema & pallor was present.

Breast, thyroid & spine were normal. CVS & RS were clinically normal.

P/A- uterus 32-34 weeks size, relaxed, longitudinal lie, vertex in the lower pole, liquor was less, FHS was regular.

P/V- Cervix was uneffaced & os closed with presenting part above the brim. Pelvis was adequate & no CPD

- Diagnosis was Primigravida with 35 wks of gestation with vertex presentation with severe pre-eclampsia & severe anaemia
- On TAS at admission- a SLUIG of 35 wks 4 days with AFI- 10 cms, grade 2 placental maturity with EFW of 2.3 kg. SD and PI ratio 3.3 and 1.24 respectively.
- After correction of anaemia with 2 pints of packed cells and stabilizing BP with antihypertensives, 2 doses of betamethasone, patient and attendars were counselled regarding the termination of pregnancy in view of fetal distress. USG revealed 35 weeks with mild asymmetric IUGR & with doppler showing raised SD ratio & PI. Patient & her attendars were not willing for termination. Consent was not given for 24 hours.
- Under spinal anaesthesia, emergency LSCS was done and extracted a single live late preterm female baby of wt- 1.5kg on 14-11-2013 at 3pm.

INDICATION being Severe PE with fetal distress.

- Operative findings were thin meconium stained liquor, LOT. Couvelaire uterus involving both anterior and posterior surface & fibrosis of lower posterior surface of uterus near POD, placenta was fundal anterior, **no evidence of placental abruption or retro placental clots which is very unusual.** Adnexa was normal.
- No uterine atony/PPH. Intra & post operative period was uneventful & was discharged on Post operative day 10.
- Baby was shifted to NICU in view of late preterm baby with low APGAR score, birth asphyxia & respiratory distress

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## Investigations

- **Hb-6.3 gms** (on admission)
- Rbc-3.1 million/cmm
- TC-14090 cells/cmm
- Hct-19.3%                      • MCV-62.7fl
- MCH-20.5pg                  • MCHC-32.6g/dl
- Platelet count-1.75 lakh
- **LDH-965 IU (raised)**
- RBS-81mg                      • Blood Urea-11mg
- Serum Creatinine-0.6mg
- Indirect bilirubin -0.4mg
- Total protein-6gm          • Albumin-2.7gm
- **Urine alb 4+**
- Globulin-3.3 gm              • SGOT-33U/L
- SGPT-20 U/L                 • Alkaline phosphatase-140 U/L

## USG report

- 1<sup>st</sup> trimester scan showed – CRL-2.9cm, 9 wks Tiny foetus with sub chorionic haemorrhage resolving 1.1 X 0.9cm
- 2<sup>nd</sup> trimester scan showed – SLIUG of 19 wks with placenta posterior, grade 1 maturity with adequate liquor.
- 3<sup>rd</sup> trimester done on the day of admission showed single live intra uterine gestation of 34 weeks 4 days, mild symmetric IUGR of 2.3kgs, with adequate liquor, & grade 2 placental maturity, placenta being located fundal & anterior. There were no retro placental clots. Doppler showed raised SD & PI ratio.

## Discussion :

Uteroplacental apoplexy is a rare but nonfatal complication of severe forms of placental abruption. It occurs when vascular damage within the placenta causes hemorrhage that progresses to and infiltrates the wall of the uterus. 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. Moreover its common to find Couvelaire uterus in the presence of abruptio placentae as a complication of severe preeclampsia or eclampsia. Couvelaire uterus is not an indication for hysterectomy. In spite of extravasation, uterus gets well contracted

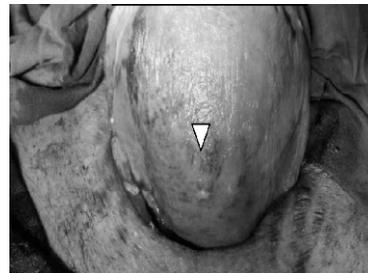


Fig-1 Anterior surface of Uterus



Fig-2 Posterior wall of Uterus



Fig-3 Fundal Region

## References:

1. Couvelaire uterus, JL Hubbard; SB Hosmer, J Am Osteopath Assoc September 1, 1997 vol 97 no 9 536
2. Francois KE, Foley MR. Antepartum and postpartum hemorrhage. In: Gabbe SG, Niebyl JR, Simpson JL, eds. *Obstetrics - Normal and Problem Pregnancies*. 6th ed. Philadelphia, PA: Elsevier Saunders; 2007:chap 19.
3. Houry DE, Salhi BA. Acute complications of pregnancy. In: Marx J, Hockberger RS, Walls RM, et al, eds. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. 7th ed. Philadelphia, PA: Elsevier Mosby; 2009:chap 176.
4. Cunningham FG, Leveno KL, Bloom SL, et al. Obstetrical hemorrhage. In: Cunningham FG, Leveno KL, Bloom SL, et al., eds. *Williams Obstetrics*. 23rd ed. New York, NY: McGraw-Hill; 2010:chap 35.
5. Chong-U Cheang et al, Acute Necrotizing Pancreatitis complicating Uteroplacental Apoplexy. Vol 46, issue 1, pages 64-67 march 2007
6. Louis.E.Phaneuf; Uteroplacental apoplexy, Boston Med Surg J 1925; 192,1037-1046 May 28

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