

Uterine Hyperstimulation in Spontaneous Labor Leading to Concealed Abruptio: A Case Report

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Objective:

To report a case of a hyperstimulation in spontaneous labor and concealed placental abruption. It aims to

- Illustrate clinical decision-making in acute obstetric emergencies
- Highlight the importance of early recognition of placental abruption
- Provide educational tools for interpreting ambiguous CTGs

Discussion:

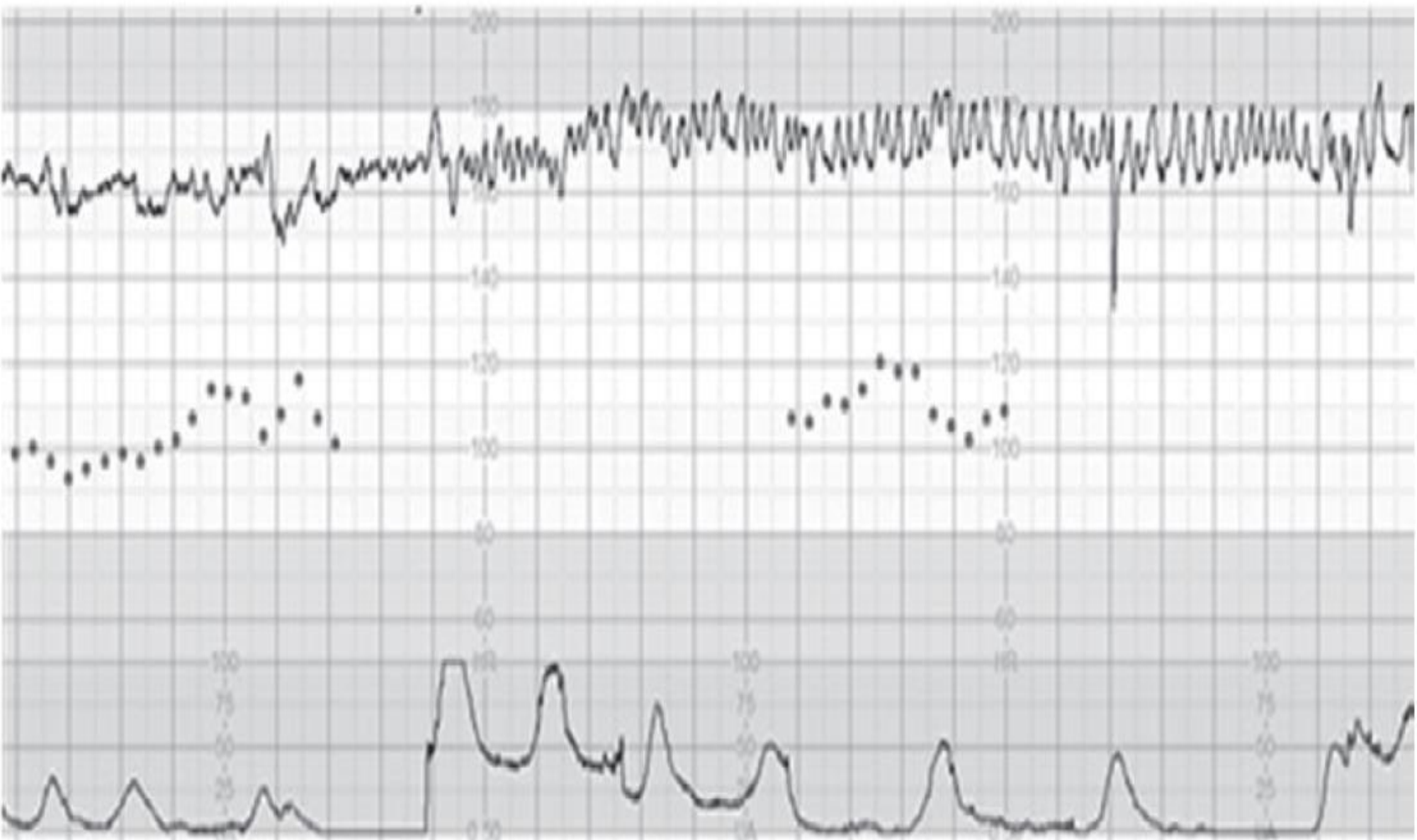
The pathological causes for spontaneous uterine tachysystole are suspected chorioamnionitis (subclinical and clinical) and Antepartum hemorrhage. It has been shown that in cases of placental abruption during the 2-h period preceding delivery the CTG showed five or more contractions in 10min, with a mean of 5.6. It is vital to appreciate that tocolysis may not be appropriate in women with uterine tachysystole secondary to placental abruption or chorioamnionitis, especially if there is maternal tachycardia or hypotension.

Conclusion:

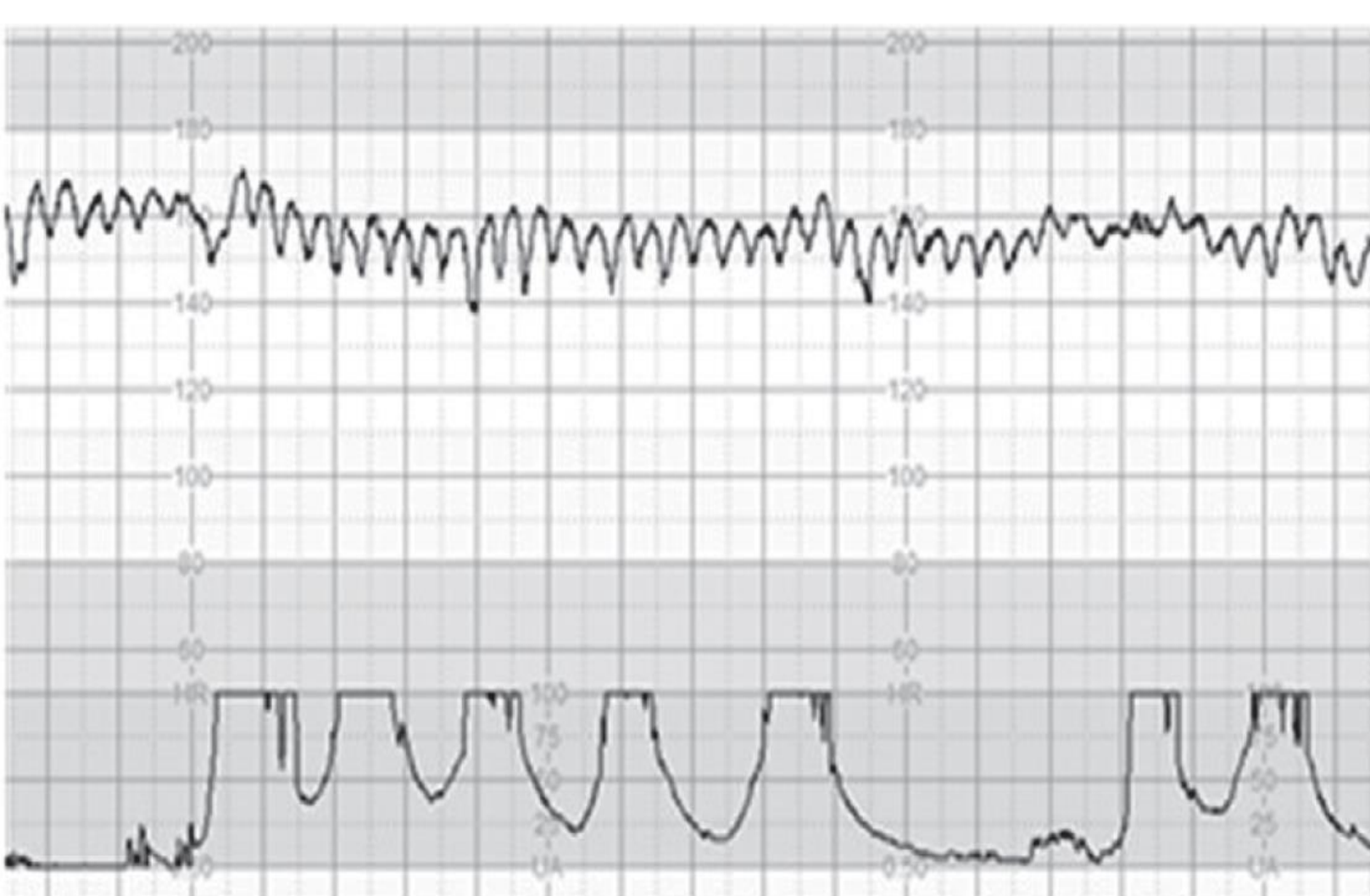
Placental Abruption complicates 1% of pregnancies and is a leading cause of perinatal morbidity and mortality. Presentation varies widely, making the diagnosis sometimes challenging. It is vital to appreciate that in a rapidly evolving hypoxia secondary to excessive uterine activity, the baseline fetal heart rate may be increased (i.e., the “Zig Zag Pattern”) due to an autonomic instability. Therefore, any increase in uterine activity (i.e., frequency, duration, strength, or the basal tone) associated with abnormalities in the fetal heart rate should be considered as uterine hyperstimulation.

Case report:

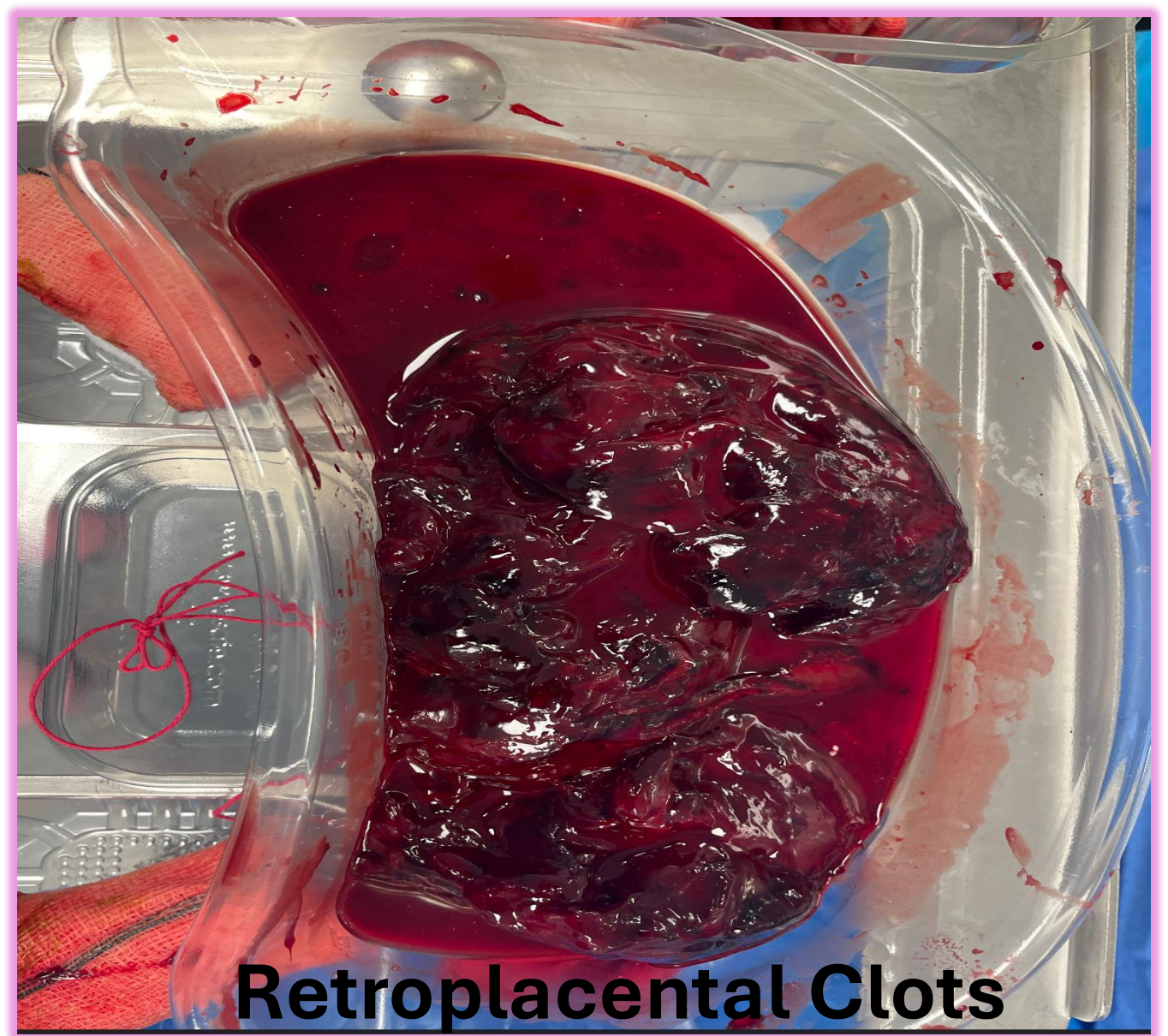
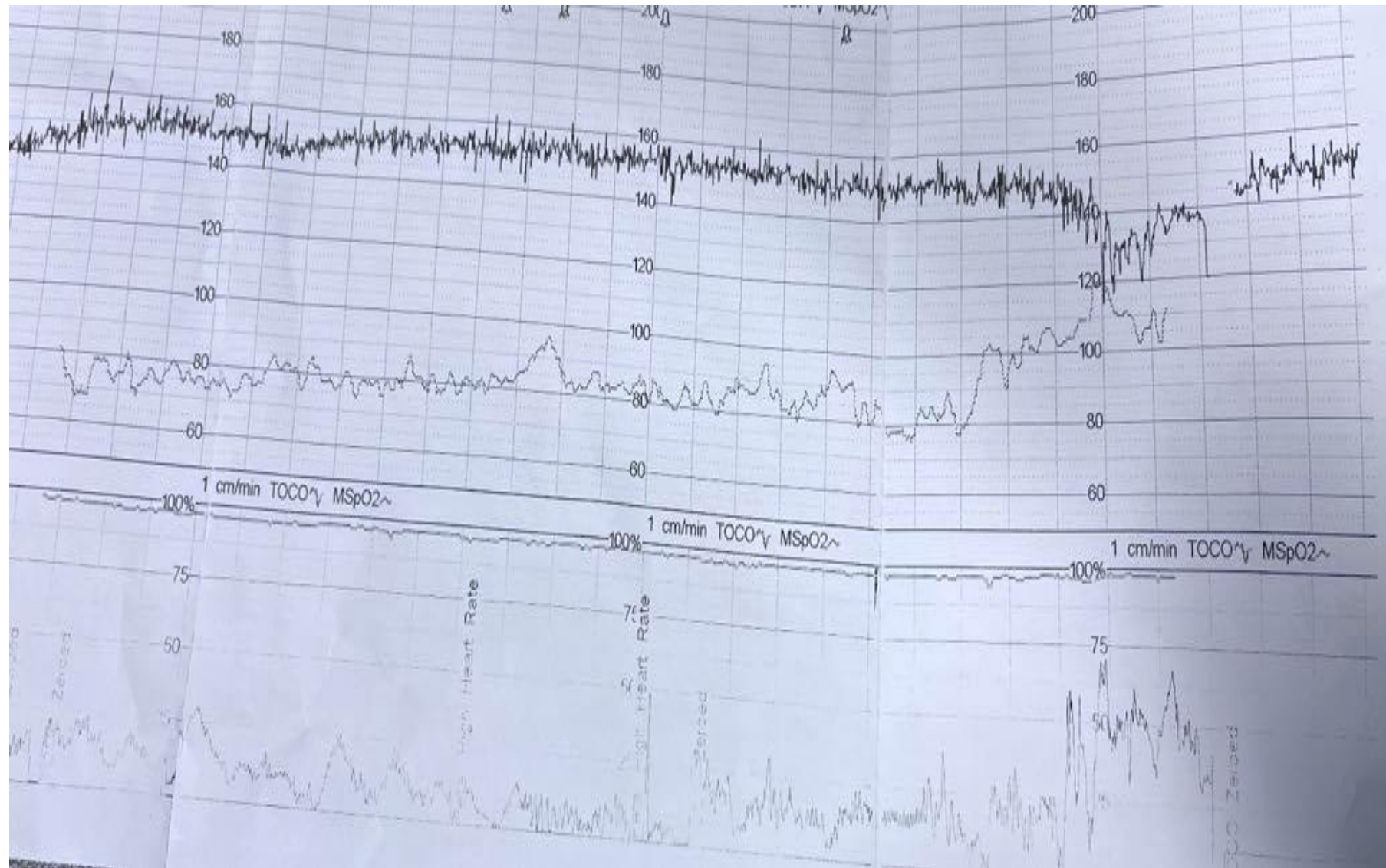
37 years old, P0+3 (recurrent miscarriages) at 41w1d, Midwife led care, reported to maternity triage in spontaneous labor with abdominal pain. On initial assessment, a good resting tone was noted with no dilatation. The patient was on Aspirin and stopped at 36 weeks, non-smoker. On cardiotocography(CTG) 5-6 contractions were noted in 10 min for at least 20 minutes. Tocolytic Injection (terbutaline 250 mcg) intramuscular given for tachysystole CTG. Dawes Redman criteria did not meet for 50 min. Doctor review was requested. CTG difficult to interpret ? sinusoidal pattern, categorized as abnormal. Immediately bedside review was done and the patient disclosed absent fetal movements for 3 hours. Abdominal palpation was tender, and exhibited 'woody' abdomen characteristics, vaginal examination: os closed, posterior, no vaginal loss. Given the abnormal CTG and abdominal findings suggestive of placental abruption, verbally consented for emergency cesarean section as CAT1, establishing IV line, and cross matching blood. Emergency buzzer for red transfer to theatre was initiated. Consultant notified. The duration was 23 min from doctor’s review till delivery of baby. baby handed over to neonatal doctor. The Apgar score was 5,8,9 and initial cord ph was 6.80 arterial with BE-23. Intraoperatively, placental abruption was confirmed by removing 400 mL retroplacental clots and placental histopathology. Management of the mother's uterine atony was carried out successfully with estimated blood loss 900 ml. Post-procedure: Patient was debriefed. Later the baby was transferred for cooling. On day 5 an MRI brain for the baby was done which showed no signs of HIE before discharge with the establishment of good breastfeeding.



Pseudo-sinusoidal pattern. Note the presence of normal variability prior to sinusoidal patte



Atypical sinusoidal pattern: Poole shark teeth pattern.



References:

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