

# Acute Feto-Maternal Haemorrhage as a Cause of Decreased Fetal Movement – A case report

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## Case Report

A 26 year old healthy secundipara was in the 39<sup>th</sup> week of gestation when she presented to the ante-natal clinic with decreased fetal movements since the past 48 hours. Her antenatal course had been normal.

A cardiotocography was done which showed a baseline heart rate of 160 beats/minute. There was decreased beat to beat variability with a sinusoidal pattern in some parts and associated late decelerations. An immediate caesarean section was carried out which resulted in a delivery of 3kg female infant. The baby was pale, shocked and hypotonic at birth with an apgar score of 1- 4 - 6. Liquor was clear and normal in volume and the placenta appeared normal. The infant's haemoglobin at birth was 3.5 gm%. All causes of anaemia including alloimmunisations, other causes of non-haemolytic anaemia and coagulopathy were ruled out. The baby was given transfusions and was discharged with normal pediatric and normal neurological findings. Both newborn and mother were ABO group compatible (O Rh positive). The Kleihauer-Betke test showed a feto-maternal bleed of 350 ml with 7% fetal erythrocytes in the maternal blood.

## Discussion

Decreased fetal movements are a feature often seen in obstetric practice, the cause of which may be obstetric or medical conditions of pregnancy. In normal, uncomplicated pregnancies acute feto-maternal haemorrhage is a cause to be kept in mind when the woman reports of sudden decrease or cessation of movements. Studies have shown that feto-maternal haemorrhage is an uncommon but important and usually overlooked cause of unexplained intra-uterine deaths near term and perinatal morbidity<sup>1</sup>.

Massive feto-maternal haemorrhage is defined as

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the leakage of more than 30 ml of fetal blood into the maternal circulation. The incidence of this in otherwise uncomplicated pregnancies is 0.3%. With an amount of more than 150 ml, perinatal morbidity increases and with a level of 250 ml or more, the risk of damage or death to the fetus is very high. The cause in 82% of the cases is unknown. However some of the etiological factors put forth are trauma to the gravid uterus, rupture of anchoring villi related to early uterine contractions, procedures like amniocentesis, cordocentesis, external cephalic version, chorioamnionitis and placental tumors like hemangiomas. 35.7% of fetuses showed fetal anomalies<sup>2</sup>.

The Kleihauer-Betke test is used for confirmation and is highly sensitive. Recently, flow cytometry has been used in the diagnosis. When mother and fetus are ABO incompatible the blood should be collected and processed immediately after delivery to avoid underestimation of the lost fetal volume. Failure to draw the sample before a caesarean section will result in a 2% false positive rate<sup>3</sup>. Reassurance can be given to parents as recurrence is extremely rare. Greater awareness of this problem will lead to early diagnosis and permit effective treatment in the form of delivery of the fetus or intra-umbilical transfusions if the fetus is pre-term<sup>4</sup>.

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