



Preterm birth: risk factors and obstetric outcome

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Objective

Preterm birth (PTB) is defined as a delivery occurring between 24-37 weeks of gestation. It has a prevalence of 11% and is the main cause of fetal morbidity and mortality. The main causes are preterm labour (50% of cases), preterm premature rupture of membranes (PPROM) and isthmo-cervical insufficiency. In case of recurrence a PTB tends to occur earlier. The main risk factor is a history of prior PTB. Other risk factors such as black race, age extremes, chronic diseases, thyroid dysfunction, harmful habits, uterine surgeries, twin pregnancies, polyhydramnios, vaginal bleeding, male fetus, fetal growth restriction and congenital anomalies are highlighted. The therapeutic orientation towards a PTB threat depends on its cause. The objective is to relate the risk factors for PTB in a pregnancy with its outcome and gauge guidance in a subsequent pregnancy.

Methods

This is a case report.

Results

Pregnant black 31 year old, GIII PII - three PTB after PPRM at 35, 33 and 26 weeks (neonatal death). Current dichorionic-diamniotic twin pregnancy with diabetes which was diagnosed in the 1st trimester and well-controlled with Metformin. Inpatient at 21 weeks for contractions and cervical length of 27mm. Subclinical hyperthyroidism (TSH <0.01mUI / L, normal T4L) was diagnosed as an intercurrent event, and methicillin 5mg / day was initiated, with gradual improvement. At 22 weeks a PPRM of the first fetus was observed and an expectant management including serial ultrasound scans, blood measurements, antibiotic therapy and fetal pulmonary maturation at a later date according to protocol was agreed on. At 24 weeks the woman had recurrent contractions which were resistant to tocolytic therapy and resulted in an eutocic delivery: first newborn: male, 475grams, APGAR score 3/4/4; second newborn: male, 650grams, APGAR score 1/4/4. Both died with 9 and 18 days of age, respectively, due to respiratory failure.

Conclusion

This case report is an example of PTB in a pregnant woman with multiple risk factors (black race, previous PTB, twin pregnancy, hyperthyroidism, male fetuses) in which the outcome was unfavourable for the newborns. In a subsequent pregnancy one will be asked to follow up on high-risk consultation and cerclage.