Twin Fetuses Papyraceus in a Spontaneous Triplet Pregnancy Presenting with Unexplained Preterm Contractions

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Abstract

Fetus papyraceus in a triplet pregnancy is indeed rare and can pose serious management challenges. These challenges are more pronounced where facilities for monitoring are either inadequate or nonexistent. A 39-year-old, grand multipara multipara was referred to the University of Maiduguri Teaching Hospital at 27 weeks gestation with preterm contractions. Materno fetal monitoring did not reveal the cause of the preterm contractions. She was delivered via caesarean section, at 36 weeks of gestation, on account of decreased fetal movement and the products were a live female fetus weighing 2.3 kg and two male papyraceous fetuses weighing 150 g and 130 g, respectively.

Keywords: Caesarean section, Fetus papyraceous, Preterm contractions, Triplet pregnancy
Discussion

The intrauterine death of a fetus (es) with a surviving twin is a challenging case to manage. The chorionicity, gestational age at diagnosis and other complications specific to the pregnancy may influence the management option. The ultrasound scan is invaluable in the diagnosis of twin pregnancy and its complication. The failure of serial ultrasound scan to detect fetuses papyraceous in the index case has also been reported elsewhere. This is thought to be due to anatomical position and technical difficulties. Maternal complications associated with fetus papyraceous include DIC, preeclampsia, hydramnios, antepartum hemorrhage, preterm labor, and anemia. The index case presented with premature contractions before the age of viability (28 weeks in Nigeria). Preterm delivery commonly by caesarean section is the usual course in fetal death in triplet pregnancies. Our case had caesarean section at 36 weeks on account of decreased fetal movement. The estimated fetal weight on ultrasound 2 weeks prior to the caesarean delivery was 2320 g and the weight at delivery was 2.3 kg. This may be a reflection of growth retardation which is a frequent complication before fetal death. Where cardiotocograph (CTG) is not available as in our case the fetal kick count was valuable in the decision to terminate the pregnancy. Although, the coagulation status was not monitored, as the cause of the preterm contraction became obvious only after the caesarean section, no obvious coagulopathy was noticed during the 9 weeks period on admission. Similar observations on intact coagulation system after a fetus papyraceous was diagnosed have been reported. The patient, on admission at 27 weeks had mild anemia but it was difficult to ascribe the anemia to fetus papyraceous as the commonest cause of anemia in Nigeria is nutritional deficiency. The surviving twin of a papyraceous is prone to neurological complications, cerebral palsy, renal failure, intrauterine or neonatal deaths. Because the twin papyraci shared the same placenta, one seem to have died shortly after the other as may be inferred from the differential fetal weights of 150 g and 130 g. The postulated cause of death in a monochorionic placentation as in this case of the twin papyracei may be that thromboplastic proteins from the first twin to die (130 g) were transferred to the then surviving (150 g) circulation, resulting in DIC. The other explanation may be that massive blood loss may have taken place from the second twin to die into the first to die who had a more relaxed circulation through vascular anastomosis. A more plausible explanation is that feto-fetal transfusion imbalance may lead to fetal or infant death or cerebral palsy and/or congenital anomaly in surviving twins. Fetal death could also be a result of congenital malformations, umbilical cord prolapsed or hydrops. The survivor in this triplet pregnancy had no obvious complications at birth probably because of its separate placenta without vascular anastomosis. Cerebral palsy is unlikely in this case as the survivor has a separate placenta from the twin papyracei.

This case report suggests that the cause of “unexplained preterm contractions” could be complications associated with multiple pregnancies. When such cases are encountered, detailed sonographic assessment by an experienced sonologist may be all that is required to unravel the cause for the “unexplained contractions” especially in regions with high twinning rate like Nigeria.

References


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