Delayed Interval Delivery of the Second Twin: A Case Report

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A 27 year old women at 23+1 weeks twin gestation delivered the first fetus. The umblical cord was ligated and the placenta was left in situ. No cerclage was applied. She was administered intravenous antibiotics and ritodrine. The second twin was delivered after 23 days of the delivery of the first fetus. Bedrest, prophylactic antibiotics with or without cerclage and non-aggressive tocolysis is reasonable for delaying the delivery of the second twin with chorioamnionitis.
(Gynecol Obstet Reprod Med 2006; 12:000-000)

Key Words: Delayed delivery, Twin pregnancy, Chorioamnionitis

The incidence of twin and multifetal pregnancies has significantly increased since introduction of assisted reproductive techniques. Multipl pregnancies also have a high risk of preterm delivery. The delivery of a viable fetus with a long interval delay between deliveries is not a usual occurrence.[1] We report a case of delayed delivery in diamniotic dichorionic pregnancy with an interval of 23 days after delivery of the first one.

Case Report

A 27 year old women, gravida 1, para 0, abortus 0 was found to have twins after ovulation induction with clomiphen citrate and intrauterine insemination. She was seen in the antenatal clinic at 22 weeks of pregnancy according to her last menstruel date. Pelvic examination revealed no cervical modification but speculum examination confirmed the diagnosis of premature rupture of membranes. An ultrasound scan showed an intrauterin twin pregnancy with the appearance of a diamniotic, dichorionic gestation. Ultrasonographic examination revealed both fetuses alive. The first fetus was in cephalic presentation with no liquor surronding him and he was close to the internal cervical os, while the second twin was in breech position. Crown-lump length measurements of both fetuses correlated with her menstrual dates. Bed rest and amoxycillin (500 mg orally every 8 hours) were recommended and tocolytics were not initiated in view of no uterine contractions and cervical modifications. The fetal lung maturity was induced by betamethasone 12 mg i.m. per day twice. After 7 days at 23 weeks and 1 day gestation, she had a delivery of the first fetus covered with a smelly green discharge and weighed 600 g. He passed away soon after. The cervix was 4 cm dilated and 70% effaced. The umblical cord was ligated and cut at the cervix level and the placenta was left in situ. The lower pole of remaining sac was rinsed with antiseptic solution. Ritodrine 100 mg i.v. for the first 12 hours were administered after the delivery of the first fetus. No cerclage was applied. The retained fetus was in breech presentation with normal growth (23+2 weeks), doppler velocimetry and amniotic fluid volume. As the clinical features were those of chorioamnionitis she was administered intravenous broad spectrum antibiotics (Ampicillin 1000 mg every 8 h and metronidazole 500 mg every 8 h) for 10 days. She was continuously monitored through clinical assessment (temperature, blood pressure, pulse rate). The clotting screen always revealed normal. The second twin was delivered by cesarean section at 26+4 weeks gestation, after 23 days of the delivery of the first fetus. He weighed 800 g with 1 and 5 minute Apgar scores of 5 and 8 respectively. He was transferred to neonatal intensive care unit and discharged 1 month later without any complications.

Discussion

Our patient was conceived by ovulation induction plus intrauterine insemination so she strongly desired to keep her pregnancy. We were persuaded to follow a rather controversial management plan even though we informed the patient about the possible infectious risks.

For prolonging the interval between the two deliveries the majority of authors perform cerclage, after ligation of the umblical cord of the delivered sibling with the placenta left in situ.[1] Subsequent treatment include tocolysis (magnesium sulfate and/or terbutaline or ritodrine and / or indomethacine), empiric parenteral broad spectrum antibiotics (ampicillin-sulbactam or clindamicin-gentamicin) and vaginal antibiotics (bacitracin or clindamicin) treatment.[2] Betamethasone (12 mg i.m. on 2 days) is generally administered to patients at >23 weeks gestation and repeated weekly until 34 weeks gestation.[2] When rupture of the membranes occurs in a twin gestation, preterm labor soon follows, with delivery of both twins. In some rare cases, the uterus ceases to contract once the first fetus is delivered.[1] Because of the traditional belief that poor outcome is certain, few attempts are undertaken to preserve the remaining twin, and induction of labor accelerated to complete the delivery.[1]

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Submitted for Publication: 15.07.2004
Accepted for Publication: 23.10.2004

Because chorioamnionitis is generally considered a contraindication to attempting delay, we did not continue tocolysis with ritodrine anymore. But we changed from amoxycillin to broad spectrum antibiotics. Some of the studies suggest that cervical cerclage should be performed where other studies showed that cerclage does not seem to be essential for success.[3] The cervix of our patient was 4 cm dilated and close to the membranes so no cervical cerclage has been performed.

İt is debatable whether our management is the most adequate treatment but bed-rest, corticosteroids for lung maturation, prophylactic antibiotics with or without cerclage and non-aggressive tocolysis is reasonable for delaying the delivery of the second twin with chorioamnionitis.

This case demonstrates that even with chorioamnionitis and abortion of the first fetus in a dichorionic twin pregnancy, there still remains an oppurtunity to try and prolong the pregnancy to achieve viability of the second twin.

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