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SUCCESSFUL FOUR-WEEK DELAYED INTERVAL TWIN DELIVERY

USPJEŠNA ČETIRITJEDNA ODGODA RAĐANJA BLIZANACA

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Dear editor!

A 34-year-old secundipara was admitted to our tertiary center in the 25th week of twin pregnancy due to preterm premature rupture of membranes. She suffered secondary sterility and conceived twins (dichorionic, diamniotic) after homologous insemination. Patient was sub-febrile with laboratory parameters indicating subclinical chorioamnionitis (C-reactive protein 119, leukocytes 14.4×10^6/L, band 16%). Cervical smears for Chlamydia, Ureaplasma, aerobes and anaerobes were negative as were patient's blood cultures too.

Patient received intravenous ritodrine tocolysis, Dexametason 12 mg daily and antibiotics: cefuroxim 3×1,5 g iv., metronidazol 3×500 mg and gentamicin 2×120 mg per day. Fetal ultrasound weight estimation for the first twin in head presentation was 630 grams, and for the second in breech 870 grams.

In spite of intravenous tocolysis, antibiotics, leucocytes count dropping to 8.1×10^6/L but still high CRP 120 mg/L, contractions never ceased. The day after admission, at 26 weeks of gestation, a female 680 g infant was delivered, with 1st and 5th minute Apgar scores of 1. The newborn died after two hours because of connatal infection.

After the delivery of the first twin umbilical cord was ligated but the cervical ostium was still four centimeters dilated with unruptured second twin amnion. Cardiotocographic surveillance revealed normal heart rate variability with frequency of 140 bpm and accelerations. Intravenous tocolysis was readministered together with antibiotic treatment.

During the four-week delay laboratory parameters were within the normal limits. Elevated values of CRP of 70 mg/L were observed two days before the second twin delivery. Ligated umbilical cord was necrotic, hanging few centimeters from the outer vaginal outlet. Ultrasound examination a day after the first twin delivery showed normally appearing placenta, second twin weighting 850 grams with amniotic fluid slightly reduced and normal umbilical, aortal and cerebral blood flow. Fetal heart rate was monitored three times daily and remained normal. At 30th week of gestation spontaneously started uterine contractions, a 1240 g male infant was delivered, 1st and 5th minute Apgar scores were 7 and 8, umbilical artery pH 7, 28. The newborn with clinical and laboratory signs of infection was admitted to the Neonatal Intensive Care Unit. Blood culture was positive for Escherichia colli and Candida albicans. Antibiotic and antimycotic therapy followed. Due to respiratory depression from 10th to 13th day he was mechanically ventilated and received blood. No signs of periventricular leucomalacia or intracerebral hemorrhage were observed on neonatal ultrasound during two months of hospitalization, but eye fundal exams have established the 3rd grade posterior retinopathy. The infant was released two months after delivery weighing 2650 g, with no signs of neurological deficit.

Delayed-interval deliveries have been the subject of numerous case reports and reviews and there are no consistent data about management and outcomes. The 1995 to 1998 United States Matched Multiple Birth File database study identified 200 twin pregnancies with the delivery of the second twin two or more days after the first.[1,2] The median duration of delay was six days (range 2 to 107 days). These delay interval deliveries were matched to nondelayed twins presenting at the same gestational age. One-year survival rate in the delayed delivery group was twice higher in relation to the nondelayed twins. Benefit of four-week delivery delay in our case is obvious, but still remains the question of influence of long lasting intraamniotic infection on neurodevelopmental outcome of the second twin. We hope that, as shown previously[3], no negative effect on long term development would be shown. According to the case presented we conclude that delayed interval delivery is a reasonable strategy in properly selected patients.

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