

Intrauterine fetal surgery in a case of myelomeningocele

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Objective

The purpose of this study - expert evaluation the reasons for adverse perinatal outcomes of intrauterine surgeries of MMC, clarifying the role of maternal factors.

Methods

In 2015 we performed the first (in the Ukraine) operations intrauterine surgeries of MMC. We used the technique of open fetal surgery, developed by Antonio Moron et al. (Brazil). Prior to 2015, in Ukraine, in cases of prenatal detection of MMC often performed an abortion for medical reasons, at least - postnatal correction. The actual frequency of MMC in Ukraine (and other post-Soviet countries) is not known. In three cases, there were adverse perinatal outcomes. Among these gestational age at surgery was 240 - 261/7 weeks. Level MMC was at S1 - L5. Duration of surgery was 2. 3 - 4 hours. During the operation there were no complications for mother and fetus. There were no infectious complications and insolvency uterine scar after surgery. All of these women had a clinical connective tissue dysplasia.

Results

One patient in the 9 days after surgery occurred premature rupture membranes. The death of the child (980 g) for 9 days after cesarean section, the reason - asphyxia. Mother had the following negative factors: BMI 35. 5; infertility for 9 years, genital infantilism. The other women had a short cervix (20 mm) and underweight (BMI 17. 5). On day 4 after surgery there were premature birth, early neonatal death of a child weighing 600 g. In a third patient on the 40th day after surgery placenta abruption occurred, antenatal fetal death (1100 g) occurred. Risk factors in women - placental abruption and antenatal fetal death in the history and uterine anomaly (not identified prior to surgery).

Conclusion

Our experience shows that maternal factors are crucial in the prognosis and outcome of pregnancy in cases intrauterine fetal surgery with MMC. The probability of adverse perinatal outcomes is increased with connective tissue dysplasia, uterine anomaly, unknown thrombophilic status.

