VIA MEDICA

EDITORIAL

Editorial

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One of the greatest achievements of perinatology is intrauterine therapy, also known as fetal therapy or fetal surgery. Thanks to well-developed ultrasound screening there is an increasing number of congenital abnormalities diagnosed prenatally; therefore, routine ultrasound examination are believed to play a significant role in fetal surgery. Some of fetal therapies enable to correct identified anomaly before birth; in other cases, intrauterine therapy reduces perinatal morbidity and is a prelude for a proper postnatal treatment.

Intrauterine blood transfusion (IUT) is the most commonly performed in utero therapeutic procedure. An indication for IUT is severe fetal anaemia, that in most cases is caused by red cell alloimmunization and less frequently by intrauterine infection (above others by Parvovirus B19).

The second most frequent intrauterine procedure is fetoscopic laser photocoagulation (FLP), which is used as a treatment of twin-to-twin transfusion syndrome (TTTS). The other indications for FLP are twin anaemia polycythaemia sequence (TAPS), twin reversed arterial perfusion (TRAP), bronchopulmonary sequestration (BPS), sacrococcygeal teratoma (SCT) and amniotic band syndrome (ABS).

One of the prenatal interventions is also fetal shunt placement, for which indications are hydrothorax, congenital cystic adenomatoid malformations (CCAM) and lower urinary tract obstruction (LUTO).

Fetal spina bifida surgery is a strongly expanding field of prenatal therapy; there are a few techniques of the procedure – open repair, minimally-invasive (fetoscopic repair) and hybrid fetoscopic (Belford) technique. Studies have shown, that prenatal surgery of spina bifida significantly improves hindbrain herniation, ventriculoperitoneal shunting, motor defects and reduces the risk of neurogenic lower urinary tract dysfunction.

Fetoscopic endoluminal tracheal occlusion (FETO) is another prenatal surgical procedure, that is performed as a treatment of severe congenital diaphragmatic hernia (CDH). The aim of this therapy is to substantially improve perinatal mortality and consequently increase the chance of proper postnatal surgery.

Fetal cardiac intervention (FCI) is the next branch of intrauterine therapy. Indications for FCI are critical aortic stenosis (CAS), critical pulmonary stenosis (CPS) and foramen ovale restriction.

It should be emphasised that all the above-mentioned procedures are currently performed in Poland. Our leading perinatal centers offer all range of the described fetal therapies for patients diagnosed with the congenital abnormalities.

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