

The learning curve and two-years results of the new based fetal center in the Czech Republic supervised by the experienced European fetal center

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Objective

Fetal center of Institute for the Care of the Mother and Child in Prague was based in 2012 and since that time serves as the one center for intrauterine fetoscopic treatment in the Czech and Slovak republics. Operations in our center are focused mostly on complications of monochorionic twins. Collaboration with the Fetal department of University Hospital KU Leuven in Belgium was crucial for the quickest acquisition of experiences and comparable results to major European centers. Through this cooperation we present the similar results with minimum complications.

Methods

Prospective cohort study. Baseline characteristic: mean maternal age 31.5 years (24-42), BMI 24.6 kg/m² (20.3-41.4), IVF 3 (29.9%), monochorionic monoamniotic 1 (3.8%), monochorionic diamniotic 24 (92.3%), Trichorionic diamniotic 1 (3.8%).

Results

We performed 26 intrauterine fetoscopic procedures from the 16-28th gestational week. Laser ablation of placental vessels, bipolar umbilical occlusion and radiofrequency ablation was used in 15, 9 and 2 cases respectively. In 21 cases TTTS was diagnosed, sIUGR and TRAP in 4 and 1 cases respectively. 22 procedures were performed in our Institute, the remaining 4, most complicated operations, were performed in University hospital Leuven (Belgium). The overall perinatal survival of all diagnoses was 37 fetuses (68.6%). Regarding 15 TTTS diagnoses treated by laser ablation of placental vessels, both of the fetuses survived in 13 cases (87%) we lost 2 twin pregnancies (13%).

Conclusion

We present two years results and experiences with intrauterine operative techniques for complications of monochorionic twins. Despite being a new based Fetal center we have comparable results with the major European fetal centers. This is the consequence of close collaboration with experienced fetal center and possibility for consultation of complex cases. This fact should be crucial for gathering experiences and should be recommended as the first step for all new based centers.