

Fetal Surgery for Spina bifida: From MOMS to personalized medicine

Moehrlen U, Stricker S, Moehrlen T, Mazzone L, Krähenmann F, Wille D, Meuli M, Vonzun L, Ochsenbein N
The Zurich Center for Fetal Diagnosis and Therapy, Zurich, Switzerland

Objective

In the MOMS trial, maternal and fetal eligibility criteria for fetal surgery were defined. By the time, this criteria may be modified if a tenable argumentation underlies this decision. This analysis describes our overall experience with trespassing eligibility criteria.

Methods

A total of 152 patients were analyzed with particular focus on which and why criteria were disobeyed, and what the impact of these deviations on outcomes was.

Results

In 65 out of 152 cases, eligibility criteria were disobeyed. In 27 (42%) cases, maternal criteria (BMI >36; uterine anomalies, psychological disorders, placenta previa, Hep B., HIV), in 49 (75%), fetal criteria (no evidence of hindbrain herniation, other fetal anomalies, abnormal karyotype, severe scoliosis, GA at surgery) were concerned. We could not identify cases where non-observation of criteria led to potential or clear-cut disadvantages.

Conclusion

This study shows that MOMS-Trial eligibility criteria may be modified with adequate medical and ethical argumentation, and with written parental consent after non-directive, full disclosure counseling. This will lead to personalized medicine in fetal surgery for spina bifida.