

P227. Birth mode in twin-pregnancies- Outcome based on the Apgar-Score 5 minutes after delivery

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Context: The ideal birth-mode in twin-pregnancies is discussed controversially in literature. While in breech presentation of the first foetus primary caesarean section is usually recommended, spontaneous birth can be planned for a cephalic-presenting first foetus and its twin under certain circumstances. The outcome of the second twin seems to be related to the time passed after the first twin's delivery and the mode of delivery.

Objective: The objective is to compare the Apgar-scores in twin pregnancies depending on the mode of birth and the delivery-time between both twins.

Methods an Patients: Key figures of 550 (230 without primary Caesarean sections) dichorial-diamniotic twin-deliveries that took place between 2007 and 2016 at Kepler Universitätsklinikum Medcampus IV in Linz, Upper Austria (former Landes Frauen- und Kinderklinik) were retrospectively analysed. Based on the Apgar-Score five minutes after delivery, the health-status of both twins is compared in dependence of the birth-mode.

Intervention: The study is designed as a retrospective cohort study.

Main Outcome Measure: The main outcome measure was the Apgar-Score 5 minutes after delivery of each twin and the time between the first and the second twin's delivery.

Results: Preliminary data show an average Apgar-Score of 8,92 for the first child and 8,69 for the second child in a subpopulation that did not undergo primary Caesarean section. For those children who were born vaginally (spontaneous and by vacuum-extraction) the average Apgar-Scores are 9,61 and 9,11 for the first and the second twin. The Apgar-Scores for secondary Caesarean Section are 8,55 and 8,52.

Conclusions: Vaginal delivery does not result in lower Apgar-Scores than a secondary Caesarean section. The lower Apgar-Scores in the Caesarean section-subpopulation might arise from a frustran spontaneous birth-trial which led to a surgical delivery of both or the second twin. Further analysis of the data will be done to determine the differences between the first and the second twin related to birth mode and time between the deliveries.

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