Is intrapartum fever associated with ST-waveform changes of the fetal electrocardiogram? A retrospective cohort study.


Department of Obstetrics and Gynaecology, University Medical Centre Utrecht, the Netherlands.

OBJECTIVE: To investigate the association between maternal intrapartum fever and ST-waveform changes of the fetal electrocardiogram.

DESIGN: Retrospective cohort study.

SETTING: Three academic and six non-academic teaching hospitals in the Netherlands.

POPULATION: Labouring women with a high-risk singleton pregnancy in cephalic position beyond 36 weeks of gestation.

METHODS: We studied 142 women with fever (≥38.0°C) during labour and 141 women with normal temperature who had been included in two previous studies. In both groups, we counted the number and type of ST-events and classified them as significant (intervention needed) or not significant, based on STAN® clinical guidelines.

MAIN OUTCOME MEASURES: Number and type of ST-events.

RESULTS: Both univariable and multivariable regression analysis showed no association between the presence of maternal intrapartum fever and the number or type of ST-events.

CONCLUSIONS: Maternal intrapartum fever is not associated with ST-segment changes of the fetal electrocardiogram. Interpretation of ST-changes in labouring women with fever should therefore not differ from other situations.