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ABSTRACT

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**Underline presenter*

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Title of Presentation: Entropy of fetal EKG associated with intrapartum fever

Clinical Basic Science

TYPE ABSTRACT IN SPACE BELOW:

Objective: To identify characteristic fetal EKG patterns that predict chorioamnionitis.

Methods: Continuous fetal EKG recording were made from women in labor at term who had a fetal scalp electrode placed for a clinical indication. Heart-rate variability (standard deviation of the rate) and entropy were calculated for 10-minute segments of data. Entropy measures the degree of heterogeneity of an individual fetus' heart beats.

Results: There was no difference in the heart-rate variability between fetuses subject to intrapartum fever (n=14) compared to fetuses who were not subject to intrapartum fever (n=11) (figure 1). The entropy of the fetal EKG was bimodally distributed for women with intrapartum fever, and normally distributed for women without intrapartum fever (figure 2).

Conclusion: Maternal and fetal inflammation may modulate the fetal EKG and provide an early warning signal for the development of intrapartum infection.

Figure 1.

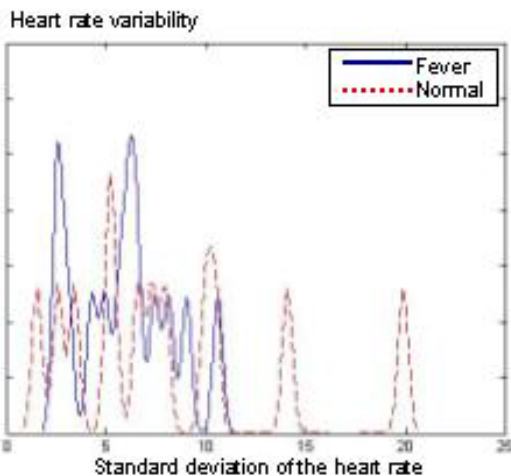


Figure 2.

