International Session Poster 13 Group 13 Maternal Physiology / Perinatal Care

オンデマンド配信 WEB 発表

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ISP-13-5

Preliminary report on the feasibility of remote CTG self-monitoring at home with mobile device

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[Objective] To clarify the feasibility of mobile CTG device self-monitoring fetal heart rate in singleton pregnant women after 36 weeks gestation. [Methods] This study was conducted at 6 university hospitals and 7 clinics. We lent the mobile CTG device iCTG (Medical Device Approval Number: 230AFBZX00024000, Melody International Ltd) to women after 36 weeks gestation during outpatient visit. The subjects used the device for 40 minutes at home at least once a week and at the time of consultation until hospitalization for delivery. The data was stored in a cloud data server, and we evaluated the acquisition rate of evaluable fetal heart rate records, and the frequency and classification of fetal abnormal heart rate pattern. [Results] We finished the study of 15 patients at this point, and there were a total of 178 iCTG data at each point of time. We could evaluate the fetal heart rate pattern in all the 178 data and acquired 168 (94.4 %) data which have recorded fetal heart rate for more than 90 percent of measurement time. There were 5 (2.8 %) data in 4 (26.7 %) patients evaluated as more than level 1 in the CTG classification system of JSOG. [Conclusion] At this point, the mobile CTG device is feasible tool for self-monitoring fetal heart rate at home. It might be possible to use the device in various medical situations in the future, such as monitoring CTG of high-risk patients or during transmission by ambulance.