

Original Paper

Effect of relaxation training and maternal fetal attachment on the prevalence of sporadic fetal heart decelerations and fetal heart beat variability in primiparous mothers

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Abstract

Background and Objective: Fetal heart pattern is one of the most important criteria in non stress test. This study was done to compare the effect of two anxiety- reducing methods, maternal relaxation and fetal-maternal attachment skills training on the prevalence of sporadic fetal heart decelerations and heart beat variability.

Methods: In this clinical trial study, 126 pregnant women were randomly divided into three groups including teaching relaxation, maternal-fetal attachment skills and controls. Training was done for four weeks. NST was performed 30 minutes before of training and after 4th week of training in the interventional groups. In the control group, NST was done in the 4th week. Cranley scale was filled at the end of the study.

Results: The prevalence of sporadic deceleration in attachment skills, relaxation and control groups before intervention was 23.8%, 19% and 21.4%, respectively. After the intervention, the prevalence of sporadic deceleration in attachment skills group non-significantly changed to 11.9%. After the intervention the prevalence of sporadic deceleration in the relaxation group significantly changed to 4.8% ($P<0.05$).

Conclusion: Maternal relaxation training decreased the prevalence of sporadic fetal heart decelerations, and enhances fetal heart beat variability.

Keywords: Relaxation, Maternal - fetal attachment, Fetal heart rate, Heart beat variability

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