The Effect of Antepartum Maternal Position Changes on Labor and Delivery Outcomes

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The goal of this research project was to evaluate the effect of antepartum maternal position changes on labor and delivery outcomes. This was a randomized controlled clinical trial in a pilot study of patients who delivered at EGH. Ultrasounds were performed on patients at 37 weeks gestation after informed consent was obtained. Patients with a fetus in the Occiput Posterior (OP) position were randomized to a maternal position change group and routine prenatal care control group. Patients with a fetus in the Occiput Anterior (OA) group were randomized to a maternal position change group and routine prenatal care control group. The OP intervention group and OA intervention group were given an instruction sheet reviewing the exercises and a daily log to record adherence. The OP control group and OA control group received a daily log to record daily exercises above routine prenatal care. Ultrasounds were performed at the onset of labor. Fetal position was recorded. Multiple variables were collected during labor. Participants in the Experimental Groups were more likely to present as occiput anterior at the onset of labor compared to the Control Groups. Participants in the Experimental Groups displayed lower rates of cesarean section after induction of labor. A 2-Proportion Z-Test was conducted. Because p-values<0.05 in the comparison of the Occiput Posterior Experimental and Control Groups, the null hypothesis was rejected. In the Occiput Anterior Experimental and Control Groups, the null hypothesis was not rejected. Antepartum maternal position changes were effective in improving labor and delivery outcomes.

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