
Introduction

The intravenous fluid administered to nulliparous women in active labor is associated with significantly shorter duration of labor and lower frequency of both prolonged labor and oxytocin administration (*Eslamian et al., 2006*).

The inadequate hydration in labor may be a factor contributing to dysfunctional labor and possibly cesarean delivery (*Garite et al., 2000*).

Exercise physiologists have shown that adequate hydration improves muscle performance in prolonged exercise (*Maughan and Noakes, 1993*).

Factors that affect progress of labor have been studied extensively in an effort both to increase our understanding of normal labor and to improve our ability to treat abnormal labor so that labor progress can be enhanced and operative deliveries avoided (*Handa and Laros, 1993*).

Myometrial contractility is one of multiple factors affecting the progress of labor (*Noakes, 1993*).

Adequate fluid would be important for optimal uterine perfusion, required not only for fetal oxygenation but also for delivery of nutrients and elimination of waste from the contracting myometrium. In most labor units, oral liquid is restricted because of concern over aspiration if an unanticipated general anesthetic is required (*Maughan and Noakes., 1993*).

Adequate fluid administration may improve labor. Fluid is usually administered at a rate of 125ml per hour intravenously as routine during labor, this regimen is used for resting patients not taking oral fluids and many women become clinically dehydrated during labor with this

regimen. The increased need for hydration during labor can result in a decreased intravascular volume if fluid replacement is not adequate (*Greiss et al., 1976*).

Because uterine blood flow is not autoregulated, a decrease in blood volume would result in a decrease in uterine blood flow. Furthermore, in pregnant women with hypovolemia, fluid is redistributed away from the uterus (*Dilts and Brinkman, 1969*).

Aim of the work

To assess the efficacy of intravenous fluid in nulliparous women in active labor on:

- Progress of labor.
- Need for oxytocin administration.