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Review of 1600 water births. Does water birth increase the risk of neonatal infection?

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Abstract

OBJECTIVES: We reviewed 1600 water births at a single institution over an 8-year period.

METHODS: We compared 737 primiparae deliveries in water with 407 primiparae deliveries in bed, and 142 primiparae on the delivery stool. We also evaluated the duration of labor, perineal trauma, arterial cord blood pH, postpartum maternal hemoglobin levels, and rates of neonatal infection. In 250 water deliveries we performed bacterial cultures of water samples obtained from the bath after filling and after delivery.

RESULTS: The duration of the first stage of labor was significantly shorter with a water birth than with a land delivery (380 vs. 468 minutes, P<0.01). The episiotomy rate in all water births was lower with a water birth than with a delivery in bed or a delivery on the birthing stool (0.38%, 23%, and 8.4%, respectively). The rate of perineal tears was similar (23%, respectively). There were no differences in the duration of the second stage (34 vs. 37 minutes), arterial cord blood pH, or postpartum maternal hemoglobin levels. No woman using the water birth method required analgesics. The rate of neonatal infection was also not increased with a water birth (1.22% vs. 2.64%, respectively).

CONCLUSION: Water birth appears to be associated with a significantly shorter first stage of labor, lower episiotomy rate and reduced analgesic requirements when compared with other delivery positions. If women are selected appropriately and hygiene rules are respected, water birth appears to be safe for both the mother and neonate.