

Low Levels of Amniotic Fluid No Risk To Normal Birth (2004)

Doctors may not have to deliver a baby early if it has low levels of amniotic fluid surrounding it, Johns Hopkins obstetricians report.

In a study to be presented Feb. 7 at the annual meeting of the Society for Maternal-Fetal Medicine in San Francisco, researchers show that babies born under such conditions fared similarly to those born to women whose wombs held normal amounts of amniotic fluid. No significant differences were found in the babies' birth weights, levels of acid in the umbilical cord blood, or lengths of stay in the hospital.

Typically, doctors have been concerned about women with low levels of amniotic fluid during the third trimester - a condition called oligohydramnios - because too little fluid can be associated with incomplete development of the lungs, poor fetal growth and complications with delivery. Amniotic fluid is measured by depth in centimeters. Normal amounts range from 5 to 25 centimeters; any amount less than 5 centimeters is considered low.

"These study results are very surprising - they go against the conventional wisdom," says Ernest M. Graham, M.D., senior author of the study and assistant professor of gynecology and obstetrics. "Amniotic fluid stems from the baby's urine, and the urine results from good blood flow, so if we see low fluid we assume there probably is not good blood flow and the fetus is compromised. This study shows the fluid test is not as good as we thought, and there is most likely no reason to deliver the baby early if other tests are normal."

The researchers studied 262 women (131 with oligohydramnios and 131 with normal amounts of amniotic fluid) who gave birth at The Johns Hopkins Hospital between November 1999 and July 2002, comparing the babies' health at birth. Patients with oligohydramnios were delivered sooner, but were less likely to need Caesarian sections. Babies born to moms with isolated low amniotic fluid were normal size and were at no increased risk of respiratory problems, immature intestines or brain disorders.

Study co-authors were Rita Driggers, Karin Blakemore and Cynthia Holcroft.

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"Are Neonatal Outcomes Worse in Deliveries Prompted by Oligohydramnios?"

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An Amniotic Fluid Index 5 cm Within 7 Days of Delivery in the Third Trimester Is Not Associated with Decreasing Umbilical Arterial pH and Base Excess

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