

Clinical characteristics and perinatal outcome with isolated oligohydramnios in low-risk term pregnancies

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Objective : To assess whether isolated oligohydramnios is associated with adverse perinatal outcomes in low-risk term pregnancies. **Methods :** We used data from Jan 2002 to May 2005 in all uncomplicated pregnancies between 37 and 41.6 weeks' gestation with a singleton fetus, underwent monitoring with serial determination of AFI. Oligohydramnios was defined by ultrasonographic determination of AFI ≤ 5.0 cm. Perinatal outcomes in pregnancies with isolated oligohydramnios were compared with those with a normal AFI. We investigated birth weight, small for gestational age neonates, 5 min Apgar score of less than 7 and meconium stained amniotic fluid with or without meconium aspiration syndrome. Exclusion criteria were premature rupture of membrane, maternal or fetal complications (i.e., diabetes, chronic or pregnancy-induced hypertension) and fetal anomalies including antenatal diagnosis of urogenital abnormalities. We used statistics analysis by Chi-square test, independent-samples T test and logistic regression analysis. **Results :** Oligohydramnios (amniotic fluid index ≤ 5 cm) was diagnosed in 9.6% (247/2551). Birth weight(g) between isolated oligohydramnios and normal group was $3,148 \pm 390$ vs $3,331 \pm 349$ ($p < 0.05$). SGA was 14 (5.7%) vs 41 (1.6%) ($p < 0.05$). AS at 5 min < 7 was 4 (1.6%) vs 8 (0.3%) ($p < 0.05$). Meconium stained AF was 47 (19.0%) vs 250 (9.8%) ($p < 0.05$). MAS was 3 (1.2%) vs 8 (0.3%) ($p < 0.05$). There were associated with musculoskeletal abnormalities in 5/247 (2.0%) such as calcaneovalgus foot (2), hip joint contracture (1), overlapping toe (1), and club foot (1) and renal abnormalities in 55/247 (22.3%) such as hydronephrosis (54) and nephrocalcinosis (1). **Conclusion :** Isolated oligohydramnios is associated with SGA, Apgar score at 5 min < 7 , meconium stained amniotic fluid and meconium aspiration syndrome. In uncomplicated term pregnancies, oligohydramnios independently increases the risk for adverse perinatal outcomes.