

## **Polyhydramnios: associated conditions with this ultrasound finding and pregnancy outcomes**

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### **Objective**

To investigate conditions associated with polyhydramnios and its pregnancy outcomes.

### **Methods**

This is a retrospective observational study carried out from January 2015 to December 2018. Pregnancies in which polyhydramnios was diagnosed were included. Polyhydramnios was defined as an amniotic fluid index (AFI) measurement  $\geq 25$ cm. Maternal characteristics and data from ultrasound were recorded. The study protocol for polyhydramnios was also recorded including evaluation of gestational diabetes, rhesus isoimmunization, serological tests, fetal anatomical survey and genetic tests in selected cases. Symptomatic cases were treated with amnioreduction. Outcome measures were onset, severity and progression of polyhydramnios, associated conditions, pregnancy results and neonatal intensive care unit admission.

### **Results**

26 pregnancies were diagnosed with polyhydramnios. Mean gestational age at time of diagnosis was 32.4 weeks (range 25.5 – 37.5). 18 cases (69.2%) were classified as mild, 7 (26.2%) as moderate and 1 (3.8%) as severe polyhydramnios. In 16 cases (61.5%), the polyhydramnios resolved, and increased in severity in 5 (19.2%). Regarding associated pathology, 6 (23.1%) were associated with malformations: 2 (7.7%) heart defects, 2 (7.7%) genitourinary malformations, 1 (3.8%) nervous system malformation and 1 (3.8%) fetus had multiple abnormalities. 3 cases (11.5%) were related to gestational diabetes and 1 case (3.8%) to rhesus isoimmunization. 16 cases (61.5%) were idiopathic. In 10 cases (38.5%) karyotyping was performed: 7.7% (2) were abnormal: one fetus with 21 trisomy and one with 17q12 deletion syndrome. 4 pregnant women (15.4%) experienced symptoms, and 3 (11.5%) required at least one amnioreduction. Mean gestational age at time of labour was 39.1 (range 35 - 41), with a mean birth weight of 3412 g (range 2850-4270 g). Neonatal intensive care unit admission was required in 5 cases (19.2%). There were no cases of stillbirth.

### **Conclusion**

Polyhydramnios is a cause of maternal discomfort for which treatment should be considered in selected cases. Detection of polyhydramnios is important due to its association with pregnancy complications that can affect neonatal outcomes.