

## Association of Fetal Abdominal Circumference and Birthweight in Maternal Hyperglycemia

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**Abstract :** Diabetes accelerates pregnancy and can cause adverse effects on the fetus. Studies have shown that fetal abdominal circumference measured in ultrasound is an early parameter for the assessment of macrosomia. The objective of the study is to compare the fetal abdominal circumferences between diabetes and non-diabetic mothers. It was a comparative cross-sectional study conducted in a tertiary care hospital in Trivandrum, Kerala, with a sample size calculated as 95 for each group. All mothers taking antenatal care and delivering at the hospital were included after obtaining consent. The mothers and their newborns were divided into 2 groups (diabetic and non-diabetic). Relevant fetal biometry values were collected from medical records, and birth weight was measured by a calibrated electronic weighing machine after birth. The data were entered in MS EXCEL and analyzed. It was found that there is a significant relationship between the fetal abdominal circumference and birthweight in diabetic mothers during the first and third trimesters.

**Keywords :** newborn, diabetes, abdominal circumference, ultrasound

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