Comparative Study for Estimation of Fetal Weight by Various Clinical Methods and its Correlation with Actual Birth Weight

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Abstract

Introduction: Fetal weight, in conjunction with gestational age, is an important indicator of pregnancy outcome.Accurate estimation of fetal weight is of paramount importance in the management of labor and delivery and it also help in avoidance of complications associated with fetal excessive or low-birth-weight babies, thereby decreasing perinatal morbidity and mortality. Various clinical formulae like Johnson's formula & Dare's formula are in use for fetal weight estimation. Aim of the study was to assess the fetal weight in term pregnancy by various clinical methods- Dare's formula & Johnson's formula and its comparison and correlation with actual birth weight.**Materials & Method**: It was a prospective observational study of 334 women at term pregnancy at GMERS medical college & Hospital, Vadnagar from April 2021 to July 2021. The formulas used in this study were: Johnson's formula and Dare's formula. The measurements were compared with actual birth weight after the birth of baby.**Results:** The mean actual birth weight was 2759.07±466.15 grams. The mean estimated birth weight by Dare's and Johnson's method was 2845.79±453.43 grams and grams 2990.81±413.68respectively. Dare's method was more accurate and had least maximum and minimum error than Johnson's method.**Conclusion:** Dare's formula is an inexpensive method for fetal birth weight estimation. It can be used on large scale because of its low cost, ease of use, and need for little training as the setup for ultra sonographic evaluation is not readily available in rural setups.

Keywords: Abdominal Girth, Actual birth weight, Dare's formula, Estimated birth weight, Johnson's formula, Symphysio-fundal height.