STUDIES ON ANTENATAL AND POSTNATAL WEIGHT OF THE FOETUS FOR ASSESSMENT OF FOETAL WEIGHT WITH PELVIMETER BY DAWN'S FORMULA

by

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Birth weight is one of the important indices in estimating the health and maturity of new born babies. During delivery large babies are found to cause much difficulty and also produce complications during neonatal period, whereas low birth weight babies are at great risk during intrauterine life as well as after birth. Birth weight of a baby depends on multiple factors like maternal weight gain, nutritional level, as well as socio-economic condition of hte family etc. Concept of perinatal medicine has brought forward antenatal care and the attention of the obstetricians is focussed not only on the mother but also on the foetus. Thus the work of neonatal paediatricians has come to play an important role. Dawn's formula for antenatal detection of foetal weight by pelvimeter might help in improving the morbidity and mortality of both the mother and foetus. The study has been undertaken with this in view.

Material and Methods

The present study embraces 100 cases of pregnancy (38-40 weeks) from the Muzaffarpur Sadar Hospital attached to Shree Krishna Medical College Hospital during the period 1981-82. Uterine length (L) was measured in cms. by fixing one end of pelvimeter at the superior border of symphysis pubis and the other end on the fundal summit. Uterine maximum transverse diameter (T) was measured by pelvimeter (cms) by fixing two ends of the pelvimeter at the uppermost uterine side walls, arm knobs were pressed on the abdominal wall till it pressed on the uterine wall. The lower abdominal wall below umbilicus was pinched by left hand to measure the double abdominal, wall thickness (D.A.W.T.) by the pelvimeter in cms. The standard D.A.W.T. for the formula is three cms. or below. If D.A.W.T. is above three cms., total excess above three cms. was deducted from the transverse diameter since two abdominal walls were coming on the way. However, half of the excess was deducted from length (L) of the uterus since one abdominal wall was coming in the way and the other end of the pelvimeter arm was pressed on the symphysis pubis. In all cases the presentation of the foetus was cephalic and the head was not engaged except in a few in which the measurement was taken in the beginning. The weight was calculated in antenatal period by Dawn's formula.

$$L\left(\frac{T}{2}\right)^2 \times 1.44 = \text{gms.}$$

Where L = Length, and T = Transverse diameter.

Results and Discussion

Out of the 100 cases the following Table

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