ESTIMATION OF GESTATIONAL AGE OF FETUS IN THIRD TRIMESTER
USING MEAN FETAL KIDNEY LENGTH

ABSTRACT:

 Background :

    Establishing the gestational age of fetus in the late trimester is a challenge to aptly treat the pregnant women. Ultrasound parameters like BPD,FL,HC,AC in the late second & third trimesters are not very reliable for dating the pregnancy. The objective of the study was to compare the GA estimated by mean fetal kidney length & multiple biometric parameters (BPD, FL, AC, HC) with the actual GA derived from the LMP.

Methods:

   A single third trimester ultrasound examination was done in a total of 100 patients . GA assessment was done by measuring multiple biometric parameters & mean FKL.

Results :

    Linear regression models for estimation of Gestational age were derived from the multiple biometric indices & the FKL. The best correlation coefficient was was observed between LMP & FL. The next is between the LMP & Fetal kidney length. The FL has shown to have a better prediction rate with standard error being 8.38 days followed by FKL & HC with standard errors of prediction being 9.34 days & 9.48 days respectively.

Conclusion :

   The present study has shown that there is a significant correlation between the fetal kidney length and the gestational age particularly in the third trimester &hence fetal kidney length can be used as an additional parameter for estimation of gestational age in third trimester, where other biometric indices may not be much reliable.

Key words: Pregnancy, Fetal kidney length, Biometric parameters, Third trimester, Ultrasound.