

## Evaluation of Normal Foetal Kidney Length by Ultrasonography and its Correlation with Foetal Gestational Age- A Study in Chhattisgarh State of India

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### Abstract

**Background:** An accurate baseline of the lengths of normal fetal kidneys is necessary to diagnose fetal abnormalities associated with abnormal kidney size. Accurate measurements also may be helpful in determinations of gestational age, particularly when the mother's last menstrual period is unknown and routine methods used to determine gestational age give conflicting results. Present study was conducted to evaluate the normal fetal kidney length by ultrasonography method and also to see accuracy of fetal kidney length in determining the gestational age of the fetus in the population of Chhattisgarh state of India.

**Materials and Methods:** There were 380 pregnant females, between 20 weeks to 38 weeks gestation with their age ranging from 18-35 years. The maximum fetal kidney length of left kidney was measured from the upper to lower pole of the kidney in a longitudinal section of the fetus in the sagittal plane. **Results:** The correlation of fetal kidney length was maximum between 35 to 38 weeks of gestation i.e. 0.991 and minimum between 20 to 24 weeks of gestation i.e. 0.928. **Conclusion:** Fetal kidney length is more accurate for determination of gestational age especially in later weeks of pregnancy.