

Fetal Foot Length as a Parameter for the Estimation of Gestational Age in Pregnancy

Edavally Suhasini, Shruthi

Dr. Sruthi, Associate Professor, Department of Obstetrics and Gynecology, Prathima Institute of Medical Sciences, Naganoor, Karimnagar. drsuhasinich@gmail.com

Abstract

Background: Gestational age assessment is of critical importance in the management, decision-making, prognostication, and follow-up of newborn infants. It is also essential for research and epidemiology. There are several parameters used for the assessment of gestational age however, a search for more accurate and reliable parameters exists. We in the current study tried to evaluate the accuracy of fetal foot length for estimation of gestation age. **Methods:** N=100 females with singleton pregnancies of 15 to 40 weeks of gestation underwent standard ultrasound fetal biometry and foot length measurements. These measurements have been used to date the pregnancies. Standard fetal biometry including BPD, FL, HC, & AC was also recorded along with the kidney length. A single observer performed ultrasonographic measurements of fetal foot length, femur length, biparietal diameter, and abdominal circumference with the help of General Electric RT 3600 equipped with a 3.5 ~ 5.0 MHz transducer. **Results:** The ultrasonographically measured foot length from 15 to 40 weeks of gestation the mean foot length at 15 weeks of gestation was 1.58 ± 0.10 cms and at the 40 weeks of gestation the Mean foot length was 7.65 ± 0.07 cms. A positive correlation coefficient(r) of foot length versus gestational age was derived ($r = +0.89$). **Conclusion:** that there is a linear relationship with a strong positive correlation between foot length and gestational age. A fetal foot length can be an alternative fetal parameter used to assess the gestational age if routine parameters are not conclusive.