

# Determination of Foetal Gestational Age

Pages with reference to book, From 226 To 228

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The following methods are used for estimation of foetal at different stages of pregnancy:

First Trunester.

1. Gestational sac this is seen from 5-6 weeks gestation tifi its time of disappearance around 12 weeks (Fig. 1).

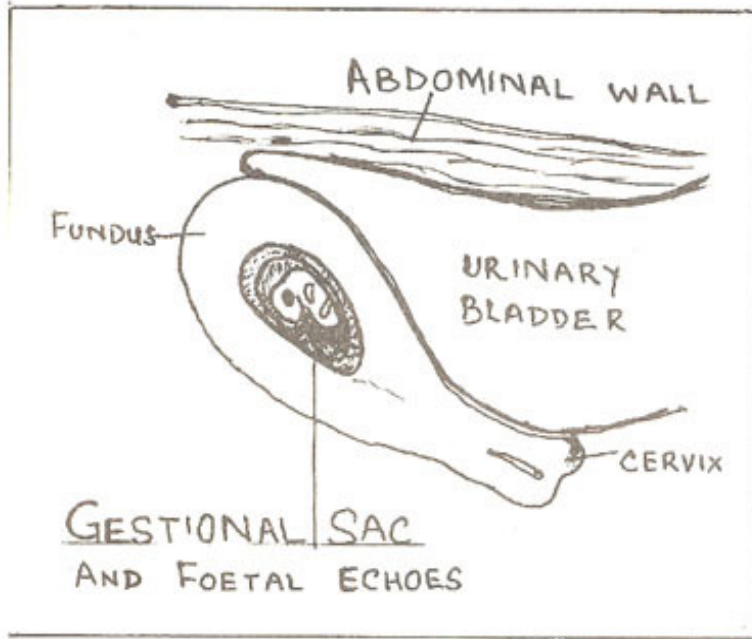


Fig. 1 Gestation Sac (8 weeks)

2. Grown Rump length (CR1) this estimation is accurate uptil 12-13 weeks (Sanders) and is not reliable after 22-23 weeks (Fig 2).

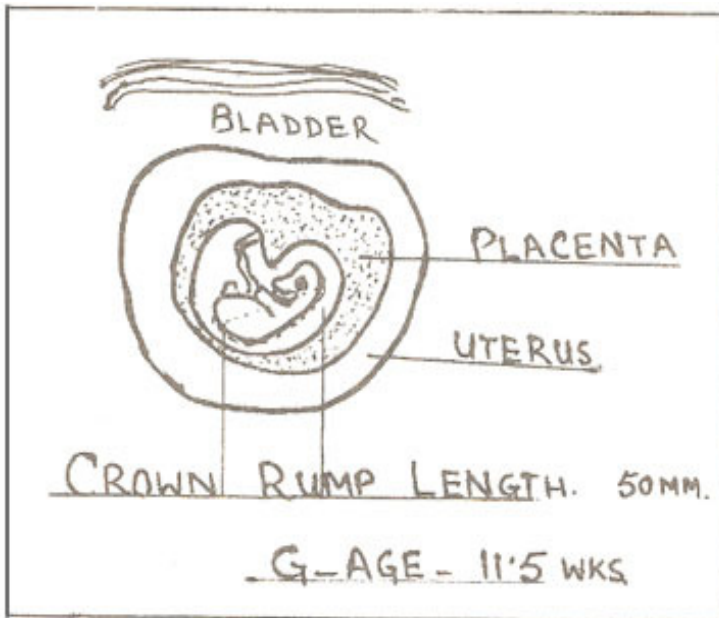


Fig. 2 Crown Rump Length (CRL)

### Second And Third Trimester:

1. Femur length this measurement is accurate uptill 23 weeks (Fig 3).

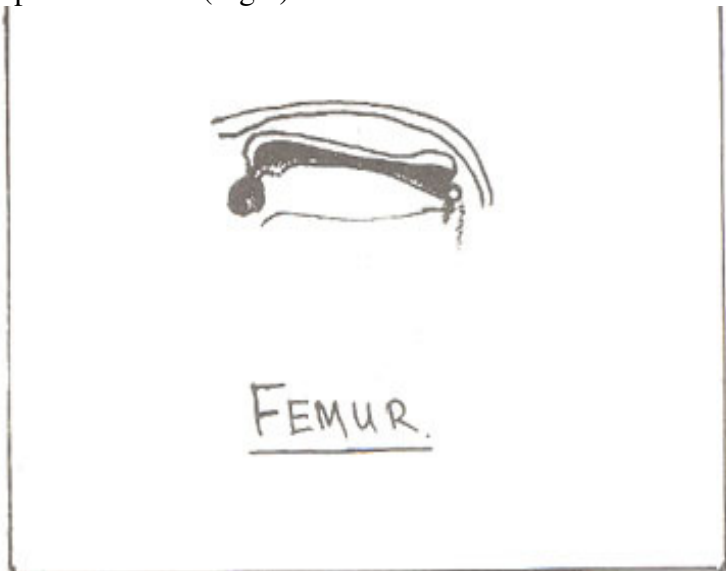
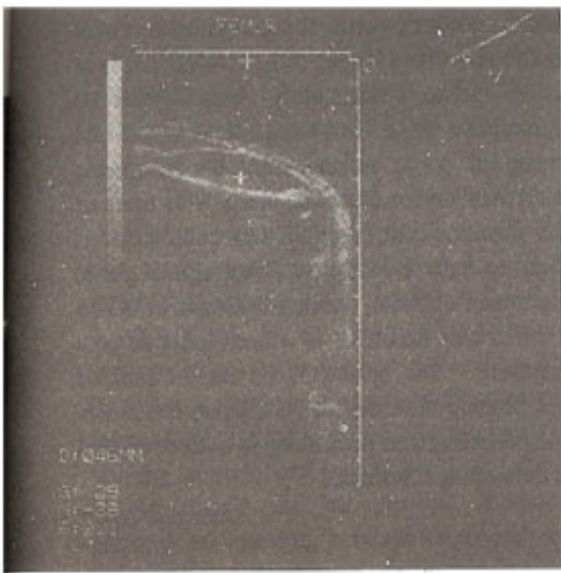


Fig. 3 Femur Length

2. Biparietal Diameter (BPD) one of the most reliable parameters from 13-30 weeks with accuracy of  $\pm 10$  days BPD is shown in the scan and should show oval shape of skull with arrow shaped at the level of third verticle. In third trimester, BPD can be used to determine the following (Fig. 4).

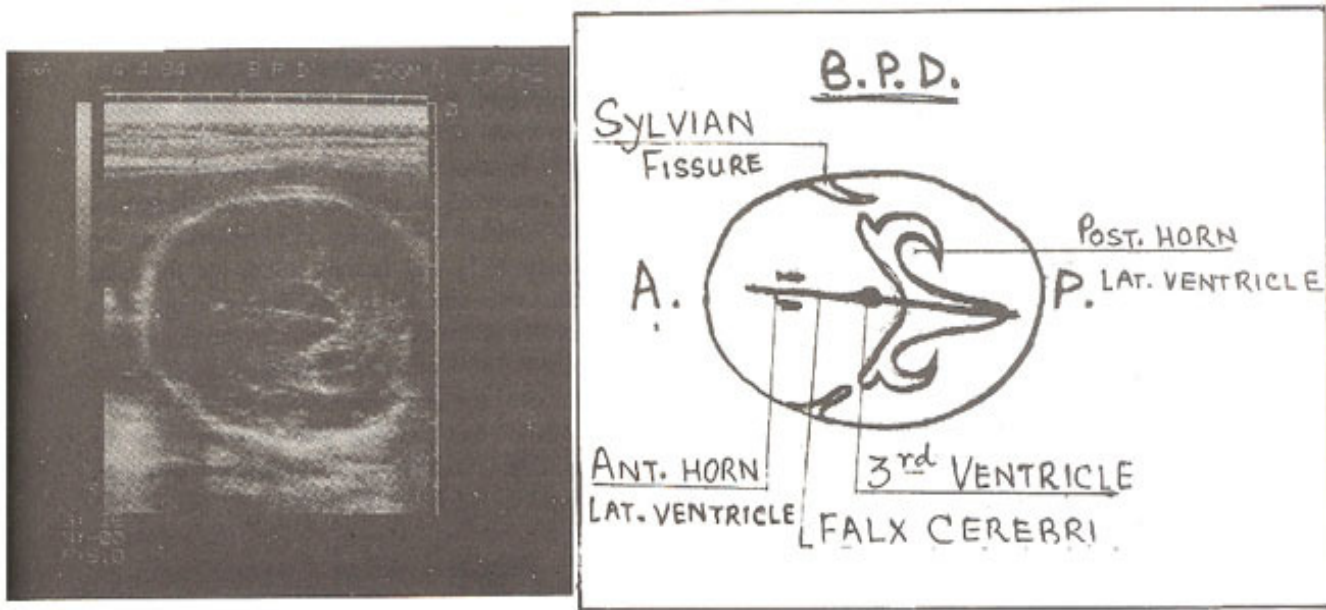


Fig. 4 Biparietal Diameter

- a. Intrauterine growth retardation (IUGR).
  - b. Foetal weight prediction (with abdominal circumference).
  - c. As indication for appropriate time for amniocentesis.
  - d. Composite mean BPD also shows degree of pulmonary maturity known to be complete by 36 weeks.
- Head and abdominal circumference (AC) are also useful in conjunction with BPD.

**Conclusion:**

Most reliable methods at different stages: In first trimester of pregnancy - CRL. In second trimester - Femur length and BPD (Better if both are taken and compared). In third trimester - composite BPD with abdominal circumference and centres of ossification.