#### Conflicts of interest

The authors have none to declare.

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Assessment of fetal gestational ageing different trimester from ultrasonographic measurement of various fetal biometric parameters in the region of Udaipur – A retrospective study



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**Introduction:** This study was undertaken to assess the gestational age in the 2nd and 3rd trimesters with the help of sonographic measurements of four biometric parameters (biparietal diameter – BPD, head circumference – HC, abdominal circumference – AC and femur length – FL) in the local population of Udaipur region.

**Materials and methods:** Regression equations were developed for estimation of gestational age using sonographic measurements of BPD, HC, AC & FL of singleton pregnancies of 1212 females of 2nd and 3rd trimesters in the region of Udaipur. Measurements were obtained using past records of Geetanjali Medical College and R.N.T. Medical College, Udaipur. Comparisons were made from previously established nomograms.

**Results:** Mean BPD, AC, HC & FL at term were obtained. Gestational age curves were obtained by BPD, HC, AC & FL measurements. Gestational age obtained by USG measurements in the second trimester was found to be more accurate compared to that obtained in the third trimester.

**Conclusion:** This study showed that ultrasonographic measurement of BPD, AC, HC& FL are reliable indicators of gestational age in second and third trimesters. They are more reliable in the second trimester as compared to the third trimester. Measurements adopted from Hadlock et al. tables correlate very well with gestation age derived from last normal menstrual period of pregnant mothers of Udaipur region.

### **Conflicts of interest**

The author has none to declare.

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**56** 

# Splenic dimensions by ultrasonography in adults of Tripura



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**Background and introduction:** The human spleen is an organ demanding constant attention from the anatomical, immunological and clinical point of view. Ultrasonography is used routinely to evaluate visceral organs in adults of Tripura. So, this study was conducted with the aim to measure the spleen length by ultrasonography, to find out the reference values of spleen length in different age groups in adults of Tripura, to find out possible correlations with the gender, height, weight and BMI.

**Materials and methods:** Healthy individuals or patients attending the RADIODIAGNOSIS Department, TMC & BRAM Teaching Hospital for conditions other than splenic were included for measuring splenic dimensions by trans-abdominal USG.

**Results and observations:** The mean spleen length in adults was  $8.8 \pm 1.32$  Cm. In males and females the length was  $8.85 \pm 1.54$  Cm  $8.72 \pm 0.89$  Cm respectively. All the spleen length was within the range of 7–11 cm. It was observed that, body weight, height, BMI all were found to be positively correlated with spleen length.

**Conclusion:** The present study was an attempt to determine the normal range of the spleen length which correlated variably with different age in groups. So, our study had provided anthropometric parameter of spleen length by ultrasonography which will be useful for reference value of spleen length in our set up.

#### **Conflicts of interest**

The author has none to declare.

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# Computer tomographic study of interpedicular distance in the south Indian population



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**Introduction:** Transpedicular stabilization of spine is a very delicate procedure that requires thorough understanding of the pedicle anatomy to minimize the rate of neurovascular complications. Interpedicular distance is one of the parameter assessed in the case of vertebral stabilization. It is also used in the assessment of the spinal canal stenosis. The transfixator in instrumentation is related to the transverse interpedicular distance. This distance varies among different ethnicity and there is a lacuna of normative data in Indian population. Thus the interpedicular distance among the south Indian population was evaluated in this study.

**Methods:** Computer tomographic images of normal spine of 50 individuals were collected retrospectively for the period of 3 months from the department of radiology. The length of the interpedicular distance were measured in both axial and the coronal view using RADIANT DICOM viewer. The values obtained were compared among the genders and age groups.

**Result:** The mean interpedicular value seen in the coronal view of the CT images for L1, L2, L3, L4, L5 were 21.45, 22.22, 24.58, 24.78, 28.18 respectively.

**Conclusion:** Preoperative CT evaluation of the interpedicular distance emphasis the need for careful usage of the instrumentation. This study provides the baseline data for the south Indian population to customize the usage of the instruments.

### **Conflicts of interest**

The author has none to declare.

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