Objective
The aim of this study was to develop customized reference ranges for basic quantitative characteristics of the corpus callosum (CC) between 19 to 32 weeks of gestation for the Indian population from a prospective cross-sectional study.

Method
Total sample size = 166. Each fetus was examined only once. High resolution 2D images of the mid-sagittal plane of fetal brain were obtained by transvaginal ultrasound. Length of CC was measured from the most anterior aspect of the genu to the most posterior aspect of the splenium, tracing a straight rostro-caudal line. Height was measured at the mid-body part of CC. Regression equations for mean and SD were generated from the dataset. Using mean and SD for each gestational age, fitted centiles were created for CC.

Results
The growth rate of CC length is almost constant between 19 and 32 weeks, with mean length doubling from 18mm at 19 weeks to 35.7mm at 28 weeks. Increase in length is almost constant at 2mm per week.

Height of CC increased from 1.9mm at 19 weeks to 2.3mm at 32 weeks. Maximum growth was seen between 19-23 weeks, following which it stayed relatively constant at 2.3mm ± 0.1mm in size.

Conclusion
As a result of technological advances, high resolution CNS imaging possible by transvaginal scan provides an excellent method for direct examination of the CC. We have generated reference ranges for measurement of CC in Indian population.

This data can be used for assessment of normal brain development and suspected fetal CNS defects. Accurate measurement of the height can help in diagnosis of more subtle anomalies associated with “callosal thinning”. As per our knowledge, ours is the first study to publish population specific reference ranges for the measurement of corpus callosum in the Indian population.