Normative value of fetal nasal bone length in chromosomally normal fetuses at 11–16 weeks of gestation
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Objective
To construct reference charts for nasal bone length in an Indian population at 11-16 weeks gestation.

Methods
This retrospective cross-sectional study was carried out at a single centre on consecutive patients that had pregnancies with a clinically normal child. All pregnancies with antenatally or postnatally identified malformations or an abnormal karyotype were excluded. Multifetal pregnancies were also excluded. 1000 patients completed the protocol which included a dating scan between 6 and 8 weeks, a nuchal translucency scan by an FMF trained radiologist, an anomaly scan between 18-22 weeks and an uneventful neonatal course. Raw centiles were computed for each CRL. They were then fitted using a least square regression model with high order polynomials. Data was compared with published data from several countries.

Results
Charts for Nasal bone length in an Indian population are reported.

Conclusion
Nasal bone lengths are available for reference for assessing an Indian population. The median nasal bone lengths were reported for 11th to 16th gestational weeks respectively. Fifth Percentile of Nasal bone length increased linearly with gestational age. Reference values for the nasal bone length at 11 – 16 weeks of gestation were identified and compared to Caucasian and Afro-American populations. Several studies have established the normal reference values for fetal nasal bone length in the first trimester, which were found to be varied by ethnicity. Reference values for nasal bone length have been reported in different countries and ethnic populations. However, to the best of our knowledge, no study ascertaining reference ranges for the nasal bone length in first trimester in Indian population have been carried out. Therefore, this retrospective study was conducted to establish reference values for the nasal bone length at 11 – 16 weeks of gestation in the Indian population.