Normal ranges of intracranial translucency during the first trimester screening
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Objective
The aim of the study was to measure intracranial translucency (IT) establishing reference ranges in uncomplicated singleton Turkish pregnancies during the first trimester screening.

Methods
A total of 334 uncomplicated singleton pregnancies were included in the study. IT measurements between 11 and 14 weeks of gestation were obtained in the mid-sagittal plane. Two independent measurements were taken and averaged to get the final estimate. The pregnancies had also a second trimester scan between 20-23 gestational weeks and had no pathological findings. Statistical analysis was performed with SPSS for Windows 20.0 software package.

Results
The assessment rate of IT was 315/334 (94.3%). Mean maternal age, gestational week, CRL, NT and IT measurements were 28.76±5.51, 12.29±0.68 weeks, 62.12±7.08 mm, 1.20±0.48 mm (range: 0.90-2.68) and 2.25±0.49 mm (range: 1.20-4.20), respectively. The median value for IT was 2.20 mm. Regarding our study population, the cut-off percentile (p) values were as following: 1. 5 mm for 5p; 2 mm for 25p; 2 mm for 50p; 2.6 mm for 75p; 3. 1 mm for 95p. IT was correlated with NT (r=0.263; p<0.001) and gestational week (r=0.239; p<0.001).

Conclusion
IT can be easily measured during the first trimester screening. The measurement quality depends also on the experience of the sonographers. In our previous series, our assessment rate of IT was at about 86%. The failure of assessment in 19 patients were mainly due to maternal obesity and fetal position. IT is the translucent appearance of fourth ventricle in mid-sagittal view. Non-visualisation of IT can be also a marker of neural tube defects. Caudal herniation of fetal brain may result in compression of the ventricle and loss of the translucent image. However, the visualization of IT does not rule out neural tube defects certainly, and vice versa.