Detection of structural abnormalities in the first trimester using a specific examination protocol
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Objective
To assess the detection rate of structural abnormalities at 11+0-13+6 gestational weeks using a standard targeted examination protocol suggested by ISUOG.

Methods
This was a prospective observational study conducted between 1/2013-2/2017 in all singleton pregnancies attending the Ultrasound Unit of the 3rd University Department of Obstetrics and Gynaecology for a routine scan at 11+0-13+6 gestational weeks. All examinations were performed by fetal medicine specialists with a Diploma by the Fetal Medicine Foundation according to ISUOG guidelines for ultrasound examination at the 1st trimester of pregnancy. The primary outcome of the present study was the detection rate of structural abnormalities at 11+0-13+6 gestational weeks.

Results
Overall, the rate of structural defects diagnosed at the 1st trimester scan was 0.94% (35/3688). The most frequent defects detected were cardiac defects (n=10), megacystis (n=4), facial cleft (n=3), exomphalos (n=3) and body stalk anomaly (n=2). Univariate regression analysis indicated that the only parameter significantly affecting the risk for congenital abnormality was increased nuchal translucency (P=.02).

Conclusion
Targeted ultrasound examination using a protocol based on ISUOG guidelines can identify many structural defects. Increased NT is independently correlated with increased risk for congenital abnormality.