Objective
The purpose of this article was to evaluate the association between fetal cystic hygroma detected in the first trimester of pregnancy and cytogenetic abnormalities, and the long-term prognosis.

Methods
We studied the outcome of fetuses in whom cystic hygroma was diagnosed in the first and early second-trimester of pregnancy using transvaginal ultrasonography (3D/4D ultrasonography). Two hundred fifty five consecutive fetuses between 8, 0 and 13. 0 weeks of gestation diagnosed as having a nuchal hygroma were evaluated ultrasonographically and karyotyped. Those with a normal chromosome complement were ultrasonographically monitored throughout the remainder of the pregnancy to document the resolution of the hygroma.

Results
140 (54.9%) of 255 fetuses were found to have a normal karyotype and twenty five of these were aborted electively. The hygromas resolved in 48 of these fetuses who had a normal karyotype within four weeks of the initial diagnosis and were phenotypically normal at birth. 115 (45.1%) fetuses had an abnormal Karyotype with trisomy twenty-one being the most common abnormality detected. 75 (65.2%) fetuses had septated cystic hygroma, 55 of them with a pathological karotype.

Conclusion
Prenatal cytogenetic analysis should be offered to women with fetal cystic hygroma diagnosed in the first trimester. A normal outcome is likely in those without chromosome abnormalities.