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Nuchal Translucency in Multiple Pregnancies

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Aim. To evaluate the prevalence of increased nuchal translucency (NT) in multiple pregnancies and its relation to fetal karyotype and pregnancy outcome.
Methods. We measured fetal nuchal translucency (NT) in 6,338 women pregnant from 10+3 to 13+6 weeks by ultrasound, and evaluated the prevalence of NT³95th centile in 115 multiple pregnancies, including 100 pairs of twins (70 dichorionic and 30 monochorionic placentas), 9 triplets, 5 quadruplets, and one quintuplet. Chorionicity, fetal karyotype, and pregnancy outcome were also evaluated in 400 singleton pregnancies.
Results. NT³95th centile in a single fetus was found in 10/70 cases of dichorionic twin pregnancies (14%), in two quadruplets, in 7/30 monochorionic twin pregnancies (23.3%), and in both fetuses in one dichorionic twin pregnancy. In the control group, NT³95th centile was found in 17/400 (4.2%) cases. In multiple pregnancies, two cases of trisomy 21 and one of 47, XXY were found. NT³95th centile was found in 2/2 fetuses with trisomy 21 (one dichorionic twin pregnancy and one tetrachorionic pregnancy), but not in the 47, XXY trisomy (trichorionic triplet pregnancy). A skeletal dysplasia and a Goldenhar syndrome were found among the 10 dichorionic pregnancies with increased NT. Three intrauterine deaths of both fetuses, one congenital heart disease, and a case of twin-to-twin transfusion occurred in 7 monochorionic pregnancies with increased NT.
Conclusion. Increased NT in multiple pregnancies indicates fetuses at risk for chromosomal abnormalities and fetal malformation, and monochorionic twin pregnancies at higher risk for adverse outcome.

Key words: *chromosome abnormalities; congenital defects; neck, ultrasonography; pregnancy, multiple; pregnancy, outcome*

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