366.00

FETAL ECHOCARDIOGRAPHIC SCREENING OF CONGENITAL HEART DEFECTS ON THE BASIS OF I.TRIMESTER NUCHAL TRANSLUCENCY MEASUREMENT

M. Katona, H. Orvos, E. Horvath, A. Pal, J. Szabo

Department of Pediatrics, Neonatal Intensive Care Unit, University of Szeged, Hungary

Antenatal diagnostic methods have an important role in the detection of congenital heart defects (CHD), which are the commonest and most severe malformations in the newborn. However the indication of fetal echocardiography (FE) is still limited to some selected cases, so most CHD-s are diagnosed postnatally. Increased nuchal translucency (NT) has been found to show a good correlation with chromosomal anomalies. The aim of our study was to examine, wether FE screening of pregnancies with increased fetal NT improves the detection of CHD. Methods: NT measurement between 10-13. gestational weeks (GW). In case of NT>3 mm, chorionbiopsy (optional), and FE between 18-23. GW. Equipment: ACUSON XP 128, 6-7 MgHz transducers, M-mode, two-dimensional, pulsed, continuous wave and color coded Doppler-echocardiographic examination. Results: During 6 years 1254 pregnants underwent FE. From these in 158 cases was increased NT found. Abnormal FE findings: 28 CHD (in 11 cases increased FE), 3 cardiomyopathies (1 increased FE), 1 cardiac tumor, 9 fetal hydrops (2 increased FE), 45 arrhythmias, 2 fetal deaths, 8 other congenital malformations (3 increased FE). Conclusion: Increased NT in euploid fetuses has a strong correlation with the presence of CHD. NT>3 mm indicates a FE between the 18-23 GW, so about 40-50 % of CHD-s can be detected antenatally.