

ST segment and T wave changes, during some diseases in children's age As risk factors of atherosclerosis and cardiac ischemic diseases

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By this time there is no doubt precondition of atherosclerosis and cardiac ischemic disease belongs to the age of childhood. Proceeding from this beginning of preventive measures must be introduced into the pediatrics. All above-said has determined goals and tasks of our investigation.

Methods: Total of 658 patients in the age of 0 to 15 were analysed during the period of 1979-2006 years. According to the nosology, the following diseases were studied: 115 cases of rheumatic arthritis (among them: 83 c. of articular form and 32 of articular-visceral form) 71 c. of nonrheumatoid carditis, 125 c. of tonsillogenic cardiopathy and 60 cases of congenital heart disease. Also were studied 96 c. of mitral valve prolapse, 85 c. of myocardial dystrophy. In these patients and 120 in practically healthy children the error of ST segment and T wave area and form were studied and analysed in usual 12 and NeHb recordings (A.D.I.) of E.C.G.

Results: Data of ST segment and T wave in healthy children are characterized by age peculiarities. It's worked out ST segment and T wave morphological changes of 8 types. Correlation of ST segment with ST in standard 12 and NeHb 3 recordings (D.A.I.) was very important and varied (it varies within the limits of 9-14). Correlation indices (especially high they were in V₅-V₆) and correspondingly in dorsal (D) recording of NeHb (>14). In V₄ index of correlation was comparatively high in AVF recording (10,492).

Conclusion: Morphological changes in ST segment and T wave should be considered by determination of one of the 8 types worked out in common context both in healthy and ill children. Changes in ST segment and T wave in different age groups in childhood require an individual approach that should remain as bearing a profound clinical information from childhood up to old age.