Particularities in Diagnosis and Treatment for Infectious Endocarditis at Children in North Eastern of Romania - 11 Years Study

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Introduction: Infectious endocarditis represents a rare pathology in children, but with lethal potential. The goal of the therapy is fast and total eradication of the infection. The purpose of this study is to evaluate the particularities in diagnosis and treatment for infectious endocarditis in children.


Results: The patients are aged between 23 days and 16 years, the average age being 7.8 years. At approximately 86.04% of the patients, the endocardial damage appeared in the pre-existent valvular lesions, specially mitral and aortic. As associated congenital malformations, the patients prevailedly presented ventricular septal defect, mitral valve prolapse, arterial canal persistence, aortic stenosis, coarctation of the aorta, aortic prosthesis. Blood cultures were collected and the most frequent identified etiological agents were: Staphylococcus coagulase-positive, Streptococcus mitis, Staphylococcus speciae coagulase-negative, Staphylococcus haemolyticus, Streptococcus bovis, Escherichia coli, for which the antibiogram showed sensitivity for beta-lactam, cephalosporins, glycopeptides, trimethoprim-sulfamethoxazole, rifampicin, quinolone, lincomamides, oxazolidinones, and thus specific treatment was set up according to the antibiogram. The echocardiographic reevaluation as well as the cardiology consultation in dynamics allowed an adequate and permanent monitoring of the therapeutic behavior. The most frequent complications were: pericarditis (30.23%), congestive heart failure (65.11%), trombembolism (18.6%) and stroke syndrome (6.97%). 34 of the patients evolved favorably, in 6 cases (13.95% of the patients) it has been surgically intervened with an as complete as possible resection of the vegetations, restoring of valvular and ventricular function and correction of the risk factor (subjacent cardiopathy), and for 3 of the patients this problem was lethal.

Conclusions: The infectious endocarditis is a severe disease that affects young age too, leading towards exitus in some cases. Diagnostic imaging and early blood cultures are of relevance in order to intervene promptly. The treatment must be targeted and applied as fast as possible.