

**Etiological and Clinical Aspects of Dilated Cardiomyopathy in Children in North-Eastern Romania**

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**INTRODUCTION:** Dilated cardiomyopathy is the most common type of heart muscle disease in children. The reported incidence rate is 0.57 cases per 100,000 children, but studies are not available in most countries. Causes of this condition include: myocarditis, neuromuscular disorders, nutritional deficiencies, collagen vascular diseases, hematological diseases, coronary artery diseases, certain types of medications, endocrine and metabolic disorders and certain malformation syndromes. The goal of this study is to establish the causes that led to the occurrence of dilated cardiomyopathy in 21 children, aged 3 months-18 years, hospitalized in Ist Pediatrics Clinic of "Sfanta Maria" Emergency Children's Hospital from Iasi, Romania, to describe the clinical presentation and laboratory workup that allowed us to establish this diagnose. The children were hospitalized from January 2007 to January 2011. Medium age at the time of diagnose was 10,95 years.

**METHODS:** We have performed a prospective analysis including physical examination, EKG monitoring and echocardiographic examination on all patients. Depending on the associated pathology, other tests were also necessary.

**RESULTS:** We have encountered 1 case of progressive muscular dystrophy (Duchenne), 2 cases of Werdnig-Hoffman disease, 2 cases of Hodgkin malignant lymphoma, 1 case of non-Hodgkin malignant lymphoma, 1 case of malignant germinal tumor, 4 cases of chronic renal failure (undergoing hemodialysis), 1 case of ethnobotanic substance intoxication, 2 cases of sepsis, 3 cases of acute myocarditis and 4 cases of lower respiratory tract infection. 16 patients (76%) had signs and symptoms of heart failure (various NYHA stages). 7 patients (33%) died due to their heart condition.

**CONCLUSION:** The etiology of dilated cardiomyopathy in children is diverse, and its outcome, symptoms and severity depend on the cause and associated pathologies. Symptoms of heart failure represent a major prognostic factor for the need of heart transplantation.