ABSTRACT

PEDIATRICS

Prevalence of patent ductus arteriosus in children under 18 years in Latvia 2018-2022

Aleksandra Paņina¹, Valts Ozoliņš², Lauris Šmits², Normunds Sikora², Elīna Ligere^{2,3}, Ingūna Lubaua^{2,3}, Inta Bergmane², Inga Lāce^{2,3}, Pauls Sīlis^{2,3}

Affiliations

¹Faculty of Medicine, University of Latvia, Riga, Latvia

²Children's Clinical University Hospital, Department of Paediatric Cardiology and Cardiac Surgery, Riga, Latvia

³Riga Stradiņš University, Riga, Latvia

Abstract

Introduction: Accounting for 5-10% of all congenital heart defects, patent ductus arteriosus (PDA) is one of the most common congenital cardiovascular malformations. The condition is often diagnosed in the neonatal period. However, it can be delayed until childhood or even adulthood. A small PDA often doesn't cause problems and may never need treatment, but a large, untreated PDA can reduce heart function or problems related to high pressure in the lungs. Aim: Analysis and summary of data from medical history of patients with PDA in the system of the Children's Clinical University Hospital. Materials and Methods: The study included 70 patients diagnosed with PDA aged 0-18 years from term infants. Data were analyzed using the diagnostic criteria for PDA. Results: A total of 70 patients were enrolled in the study, of whom 71% (n=50) were female and 29% (n=20) were male. Most patients (60%) were children aged 0 to 3 years (n=42). The small and moderate PDA type predominate, each type is 44% (n=31) by PDA criterion. When analyzing one of the most important echocardiographic criteria for PDA, the LA /AO ratio, pulmonary hyperperfusion was present in 53% (n=36) of patients. Angiography to close the PDA was performed in 94% (n=66) of cases, open surgery was performed in 3% (n=2) of cases, and surgery was discontinued in 3% (n=2) because of disease. Of the total number of patients, complications occurred in only 5,8 % (n=4), including migration of the occluding device 3% (n=2), residual PDA 1,4% (n=1), and a small piece of the encapsulating ligature 1,4% (n=1). Conclusions: By 2021, 359 000 children had been registered in Latvia, and ~ 0,018 % of children aged 0-18 with PDA. For children born full-term, early diagnosis and correction of PDA enables a good long-term quality of life.

Citation

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