



DYNAMICS OF ECHOCARDIOGRAPHIC INDICATORS OF THE BASE OF THE PULMONARY TRUNK IN CHILDREN BORN WITH CONGENITAL HEART DEFECTS

Saidova Sadoqat Yo'ldoshovna

Bukhara State Medical Institute

Abstract: *In the presented scientific work, the basis of the echocardiographic indicators of the pulmonary trunk in children born with congenital heart defects is given.*

Key words: *heart, EXOKG examination, lung stem base, congenital heart defects.*

Relevance of the topic

Congenital heart defects (CHD) account for almost a third of all major congenital anomalies and are diagnosed in more than 1 million newborns worldwide each year. In Uzbekistan, the birth rate with congenital heart defects ranges from 5.5% to 15.7% per 1000 live births[1,4]. The social importance of the problem is determined by the fact that congenital heart defects account for about 50% of congenital developmental anomalies that lead to disability. According to the results of scientific research of scientists, birth defects of the cardiovascular system are more common in boys [6].

Congenital cardiovascular defects, also called congenital heart defects (CHDs), are systemic problems that result from abnormal formation of the heart or major blood vessels that are present at birth or that may or may not manifest at any time after birth. The overall rate of congenital heart defects in live births is 0.8% [3].

Exo, which pediatricians use to assess heart activity, uses sound waves to create motion images. The gold standard for the diagnosis of CHD in pediatric patients has expanded with heart murmurs and the development of its application technology[2,7].



Diagnosis of congenital heart defects is one of the most difficult sections of cardiology and echocardiography. Thanks to modern technologies of echocardiography of the fetal heart and prenatal diagnosis, it became possible to diagnose congenital heart defects early, which contributed to a significant decrease in the number of adult patients with this pathology[5,8].

The purpose of the study. Dynamic study of echocardiographic parameters of the base of the pulmonary trunk in children from birth to 3 years with congenital heart defects in Bukhara region.

Research materials and methods

In this work, an echocardiographic analysis of the width of the base of the pulmonary trunk in children born with congenital heart defects from birth to 3 years in Bukhara region is presented. For the purpose of investigation, 60 boys from birth to 3 years old with congenital heart defects were conducted.

Children's age	1-28 day	1 year	2 year	3 year
Number of healthy children	10	10	10	10
CHD number of children	4	5	5	6

Research results

In healthy newborn boys, the width of the base of the lung stem ranged from 6.4 to 12.0 mm, the average was 9.6 ± 0.39 mm. By the age of 1, this indicator was from 6.5 to 13.4 mm, the average was 10.0 ± 0.21 mm. In 2-year-old healthy boys, the width of the base of the lung stem varied from 8.4 to 15.2 mm, and the average was confirmed to be 11.8 ± 0.19 mm. At the age of 3, this indicator varied from 9.2 to 16.0 mm, and it was 12.8 ± 0.21 mm on average.

In newborn boys born with blue type of congenital heart defect, the width of the base of the lung stem was from 6.0 to 9.0 mm, the average was 6.8 ± 0.27 mm. In 1-year-old boys, it was observed that the width of the base of the lung stem is from



5.0 to 7.0 mm, on average - 6.3 ± 0.21 mm. In 2-year-old boys born with congenital heart defects, the width of the base of the pulmonary stem varies from 5.5 to 6.8 mm, on average - 6.0 ± 0.13 mm, and by the age of 3, the width of the base of the pulmonary stem is 5.5 to 6.5 changed to mm, and averaged 5.7 ± 0.15 mm.

Summary

The results of our research showed that when comparing the echocardiographic indicators of the width of the pulmonary stem base in healthy children and those born with a blue type of congenital heart defect, it was found that the width of the pulmonary stem base in children born with a congenital heart defect dynamically decreases with age compared to healthy children. This indicated that the stage of decompensation is approaching in children born with congenital heart defects. The results of this indicator require urgent surgical procedures in patients.

LITERATURE

1. Yuldashevna, S. S. (2022). Analysis of Factors for the Occurrence Congenital Heart Defects in Children. *Miasto Przyszłości*, 24, 179-181.
2. Saidova, S. Y. (2022). Echocardiographic and Anthropometric Analyzes of Children Born with Tetrad of Fallot. *Central Asian Journal of Literature, Philosophy and Culture*, 3(11), 369-373.
3. Saidova, S. Y. (2021). Revealing echocardiographic and anthropometric changes in children from birth to 3 years old with congenital heart defects. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(9), 1071-1075.
4. Саидова, С. Ю. (2022). Выявление эхокардиографических и антропометрических изменений у детей, рожденных с врожденными пороками сердца (0-1 года). *Журнал биомедицины и практики*, 7(3).
5. Саидова, С. (2021). Юрак туғма нуқсонлари билан янги туғилгандан 3 ёшгача булган болаларда антропометрик ўзгаришларни аниқлаш. *Общество и инновации*, 2(2/S), 439-445.
6. Саидова, С. (2021). Выявление антропометрических изменений у детей от рождения до 3-х лет с врожденными пороками сердца. *Общество и инновации*, 2(2/S), 447-454.



7. Saidova, S. Y. (2021). A study regarding revealing echocardiographic and anthropometric changes in children from birth to 3 years old with congenital heart defects. ACADEMICIA: An International Multidisciplinary Research Journal, 11(10), 395-399.