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Analysis of Clinical-Anamnestic Data of Babies Born With Intra-Ventricular Heart Wall Birth Defect

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ANNOTATION

Heart ventricles intermediate wall birth defect after separation as a separate disease in 2015 and first Topochinov P.F. it was described anatomically-topographically and histotopografially by him after his anatomical structure was written out. As a result, a classification of this disease has been developed. Since circulatory disorders in the heart are considered important, the location of the birth defect, a classification based on their size has been produced. The ventricles consist of membranous and muscular parts in the composition of the intermediate wall, the membranous part occupies relatively little space and is located adjacent to it under the lid of the aorta. When viewed from the right ventricle side, the membranous part is adjacent to the septal layer of the three-layer cap. The left ventricle forms the upper border of the exit path from the ventricle.

Introduction: the ventricles the rest of the intermediate wall is made up of muscle tissue and spread in three directions, in the lower, towards the edge and towards the front, starting from the membranous part. In it, three parts are distinguished: the barrier part of the entrance to the ventricle – behind the membranous part between it and the atrioventricular cap, the columnar part – from the membranous part to the apex of the heart, and at the exit of the ventricle in the place up to the supra-ventricular doen.A perimembranous defect is called If a defect is located in any of these muscle parts.

Cardiac ventricular spacing tissue structures in the myocardium have been confirmed to have a structure as follows: muscle cells are composed of uniform myofilaments, composed of hexogenally located Z-strips, among which is observed the presence of actin, desmin, vimentin and filamin, composed of tropomyosin.

In the cytoplasm of cardiomyocytes, it is observed that there are a large number of mitochondria and that they are not connected to each other, each operating independently. Several types of mitochondria in the cytoplasm of cardiomyocytes are differentiated, including subsarcolemmal, mejfibrillary, which have been found to contain mitochondria located around the nucleus.

The fact that cardiomyocytes in the wall of the ventricles differ from cardiomyocytes in that they have an abundance of secretory granules and the presence of a feature of mitosis.

The heart of a 4-year-old boy was found to contain colligene fibers located circularly around the ventricular intermediate wall birth defect, from which finger-like fumes were observed to spread and penetrate into the myocardial tissue.

These networks are found to contain collagen fibers that are densely packed together, and they contain countless curved-bugri and tilted areas. Collagen fiber Tufts are not located betartibly, but are instead found to have formed Tufts in an orderly manner along with other structures of connective tissue circularly around the defect. The interstitium of the myocardial tissue around the defect also shows the appearance of strongly developed connective tissue, including collagen fibers. Collagen tutams are found to be strong in some areas, less developed in other areas, due to the presence of a large number of growths that come out of them, the presence of collagen fiber tutams, which also have an excellent structure in the deep layers of the myocardium. In a 7-year-old patsient heart ventricles it was observed that an intermediate wall defect is located in the membranous part and that a surgical procedure was performed in it, but complications developed after the procedure. Based on the results of the morphological examination, it was observed that in the surgical procedure, the sutures were removed from the very superficial insertion and led to complications.Since the intermediate wall of the ventricles of the heart is known to find evolution at 4-5 weeks of embryogenesis, it will be possible to assume that the defect that appears in it occurs under the influence of environmental and genetic factors that arise during this period. Under the influence of pathological influences, defects are observed in the heart without finding an evolution of the ventricular intermediate wall completely. Sometimes this defect manifests itself as a lump of an anomaly of the heart. Cardiac ventricles intermediate wall birth defect can be caused by chromosomal mutations and dotted genetic changes in the form of causes.The gene mutations leading to cardiac ventricular intermediate wall birth defect have been confirmed to be mainly related to the GATA4 gene. Mutation of this gene in most cases has been confirmed to cause birth defects of this appearance, that is, the intermediate wall of the heart ventricles.

It became known when the heart of children who died from an intercostal wall defect was histologically examined, that the defect was found that strongly developed collagen fiber fumes were located around the hole, and the fumes scattered from them grew and thinned into the myocardial tissue. It is observed that the collagen fibers contained in the connective tissue that wrapped the defect gave rise to a consistency of collagen fibers located in a certain order. Among the collagen fibers, fibrocytes of an oblong shape are located, and their nucleus is also found to be oblong in shape. In some cases, it is found that the fibrosis layer that surrounds the defect is much thicker, the collagen fibers in it are located in a circular and concreted position, and from it the smoky networks are separated and spread out, entering the range of muscle tissue. It is found that during the fetal period, the heart ventricles have an intermediate wall thickness of 21.4 mm, a width of 15.3 mm.

The purpose of the study: Analysis of clinical-anamnestic data of babies born with intra-ventricular heart wall birth defect

Materials and methods of research: During the last two years (2021, 2022), clinical-anamnestic and pathologoanatomic data were studied at the autopsy of 22 pediatric patients who died from complications of Wall birth defect disease in the range of cardiac ventricles, which were not carried out surgical procedures brought from Akfa Medline and Eramed private clinics at the Republican Center for pathological anatomy of the The distribution of children who did not undergo surgery by age groups took the following tone, that is, they lived for 3-5 months and died, for a total of 6, of which half were boys and half were girls. The second cohort were infants aged 7 months to 1 year who died, for a total of 15, of whom 9 were boys and 6 were girls. In the third group, 2-3-year-olds formed a total of 14 children, of whom equal half were boys and half were girls. In the fourth group, a total of 13 persons under the age of 4 were identified, of which 6 were boys and 7 were girls. Out of a total of 48 children, 52.1% were boys and 47.9% were girls. The heart ventricles of the intermediate wall were considered to be distributed according to how long after the surgery of the birth defect, different complications developed and died children died after the surgical procedure. The results obtained were distributed as follows. Those who died 5-6 hours after surgery were 3, 13.6%, those who died 11-12 hours were 5, 22.7%, those who died 24-28 hours were 4, 18.2%, those who died 7-14 days were 6, 27.3%, those who died 5-6 months were 4, 18.2% .

Research results: During the last two years (2021, 2022), clinical-anamnestic and pathologoanatomic data were studied in the autopsy of 48 mosquito carcasses that died from complications of Wall birth defect disease in the range of cardiac ventricles brought from Akfa Medlaine and Eramed private clinics at the Republican Center for pathological anatomy of the OSR SSV. Of these, 28 (58.3%) were found to have a ventricular INTERGROWTH wall membranous portion defect, 12 (25%) a muscle portion defect, and 8 (16.7%) a trabecular portion defect. The diameter of the membranous portion defect was found to be greater than and equal to the diameter of the aortic cap in 52.1%, half the diameter of the aortic cap in 29.6%, and 1/3 the diameter of the aortic cap in 18.7%. The diameter of the muscle part orifice was found to be 37.5% the diameter of the aortic cap, while the diameter of the rest (62.5%) was found to be smaller than the diameter of the aortic cap. The trabecular area birth defects were found to be less than the diameter of the aortic cap of almost all of them. Paying attention to the table, it is observed that the defect in the 1st row is greater than the diameter of the aorta and the defect in the 2nd row is close to the diameter of the aorta, which is 52.1% of the total. It has been observed that the defect in the 3rd row is 29.1% equal to half the diameter of the aorta, and 1/3 of the diameter of the aorta in the 4th row is 18.7%. This table provides another necessary information, that is, the heart ventricles are divided by the period of life of those who died from various complications in an intermediate wall birth defect. It was cited as making up 12.5% of people who lived between 3 and 6 months of age, 35.4% of people who lived under 1 year of age, 31.2% of people who lived under 2 years of age, and 20.8% of people who lived under 4 years of age. This table also lists the immediate causes of death of children in each group. Children with defects greater than the diameter of the aorta have been shown to die mainly from heart failure, wheezing pneumonia, thromboembolism. Birth defect size was found to be associated with Eisenmenger syndrome, pulmonary hypertension, aortal insufficiency as the cause of death in about half the diameter of the aorta. Pulmonary hypertension, Eisenmenger syndrome, and wheezing pneumonia have been identified as causes of death when the defect is equal to 1/3 of the aortic diameter.

Conclusion. So, based on the data shown in these examples, it can be concluded that ultrasound examination of the fetus is an important measure of medical examination of pregnant people. As a result of it, the pregnant is prescribed to carry out other additional examinations, or it is decided whether the child should be removed or kept until childbirth. Ultrasound examination of the heart at the age of 20 weeks of gestation is considered important for detecting defects in it. An increase or decrease in Amnion fluid is the main criterion for re-conducting an examination at week 24-25. The discovery of cardiac birth defects in the 2nd screening examination is considered to be a complete non-examination of the pregnant woman at the first examination, i.e. week 18-22. If the fetus is diagnosed with a congenital heart defect, increased amnion fluid, baldness of the tubular bones of course the fetus will need to be caryotyped to deny the chromosomal abnormality.

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