# 1. A CASE REPORT OF SINGLE VENTRICLE - PECULIARITIES OF EVOLUTION IN A 8-MONTH-OLD CHILD

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**Introduction.** Single ventricle is a type of malformation when the heart has both normally developed atria, but they open into a single ventricular chamber. The disease has a multifactorial nature in which both genetic and teratogenic factors during pregnancy are involved. This is a rare type of congenital heart defects (CHD): it accounts for no more than 2.5% of all, the overall incidence does not exceed 13 cases per 100,000 live newborns. Gender and ethnic differences in morbidity have not been established. The disease refers to critical congenital malformations, manifests soon after birth and is associated with a high risk of mortality. This explains its great importance in practical cardiology which requires improvement of medical care for such patients.

**Case presentation.** We present a case of a child born on 19.04.2023 from 4th pregnancy, 3rd delivery at 40-41 weeks of gestation (3rd pregnancy ended-up with spontaneous abortion at early stage). The body weight at birth was 2445 g and body length 49 cm. Apgar score was 7/8 points. The pregnancy was marked by oligohydramnios, severe gestosis in the first trimester and maternal smoking. Mother was not taking folic acid as recommended. Congenital heart disease in the fetus was diagnosed at 38 weeks of gestational age. After birth was confirmed the diagnosis of "Double inlet left ventricle associated with transposition of great vessels and pulmonary stenosis". This type of univentricular atrioventricular connection accounts for two-thirds of cases. Although L-transposition of the great arteries (L-TGA) occurs more frequently, in our case was confirmed the D-transposition of the great arteries (D-TGA). During the first 5 months of life the child developed two episodes of pneumonia manifested clinically with peripheral cyanosis, fatigue, tachypnea and chest retractions, and poor weight gain. At the age of 7 months, he underwent pulmonary artery banding and bidirectional Glenn procedure. However, at the age of 8 months the child has severe malnutrition: weight 6,5 kg (<3 percentiles; <-2 z-scores), height 71 cm (50 percentiles) and weight-for-length ratio (<3 percentiles; <-3 z-scores). Unfortunately, the diseases progressed and at the age of 8 months and 12 days the child was hospitalized in an extremely severe condition with significant respiratory distress, severe malnutrition, unstable hemodynamic parameters and risk for sudden death.

**Discussions.** Although the child underwent surgical correction, the prognosis remains reserved due to additional risk factors, including malnutrition and generalized tissular hypoxia. In such cases supplemental oxygen may help alleviate hypoxemia, and acid-base or metabolic disturbances should have correctable factors mended.

**Conclusion.** The management of such complex types of congenital heart disease need a multidisciplinary approach with timely applied nutritional, metabolic and circulatory corrective measures.

**Keywords.** Complex congenital heart disease, single ventricle, pneumonia, malnutrition.