

GALEN VEIN ANEURYSM AS A CAUSE OF HEART FAILURE AND PULMONARY HYPERTENSION IN NEONATES

V. Benjak, A. Dasovic Buljevic, D. Saric, Z. Gjergja, Z. Delija-Presecki, **I. Malcic**
¹*University Hospital Centre Rebro, Department of Neonatal, Intensive Care Unit and
Department of Cardiology, Zagreb, Croatia
ivanmalcic@hotmail.com*

Galen vein aneurysm (GVA) is very rare arteriovenous (AV) malformation, but it is the most common cause of heart failure related to an extracardiac AV developmental malformation. We present three term male newborns with GVA, perinatal heart failure and pulmonary hypertension. Patient 1: Prenatally cystic brain anomaly was diagnosed. After delivery cyanosis and heart failure. Catheterisation confirmed pulmonary hypertension and excluded other CHD. Brain ultrasound; non-echogenic cystic mass in posterior cranial fossa. CT; vascular anomaly of great venous sinuses. Heart failure and cyanosis progressed in spite of intensive treatment. The newborn died in age of 9 days from massive pulmonary haemorrhage. Patient 2: Hydrocephalus doubted prenatally. Elective caesarean section was done. The newborn did not breathe autonomously and artificial ventilation started. Despite good myocardial contractility, circulation was hardly maintained. In period of few hours a continuous murmur was audible upon skullcap. Imaging techniques showed GVA and agenesis of corpus callosum. Right ventricular pressure was 60 mmHg. Neuroimaging technics showed GVA. The newborn died in age 25 hours. Patient 3: Normal gravidity and delivery, without prenatal diagnosis. Progressive heart failure after delivery, no cyanosis. Right heart cavities were dilated, right ventricular pressure 65 mmHg. Tricuspid regurgitation and right-to-left shunt through ductus arteriosus. The status worsened, with signs of myocardial and cerebral ischemia. The newborn died in age of 46 hours. Severe heart failure and resistant pulmonary hypertension did not allow us etiological treatment - embolisation of the fistula or similar method. In all three patients diagnosis was confirmed by autopsy.

