

## NEUROSONOGRAPHY OF CONGENITAL MALFORMATIONS OF THE BRAIN

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**OBJECTIVES:** to establish frequency of the some brain malformations to newborns with transfontanelar neurosonography. **MATERIALS AND METHODS:** Sonographic findings of the neonatal brain have been analysed in the 6 year period(1997 – 2002). **RESULTS:** Gray scale ultrasonography of the neonatal brain was performed in 805 newborns and 45(5,59%) are with cerebral malformations. The most common malformation is the Chiari malformation (21 newborn-46,6%), characterized by the caudal displacement of the cerebellar vermis into the foramen magnum and with some degree of hydrocephalus. Choroid plexus cysts have been found to 13(28,8%) newborns. Stenosis of the Sylvian aqueduct (6 babies-13,3%) is characterized by enlarged lateral ventricles and third ventricle. In alobar holoprosencephaly (2 babies-4,4%) a large singular midline ventricle could be shown. Both thalami are fused and there is absence of the falx cerebri and interhemispheric fissure. In 2(4,4%) children with agenesis of the corpus callosum, there is absence of the corpus callosum with marked separation of the frontal horns. The medial cerebral gyri and sulci have a radial pattern. Dandy-Walker malformation (1child-2,2%) is characterized by a large posterior fossa, which actually represents a huge fourth ventricle. **DISCUSSION:** congenital malformations of the brain are antenatal diagnosed by ultrasound investigation of the pregnant woman. If diagnosis is not appointed antenatal from anyway reason, then transfontanelar neurosonography is a method of choice for postnatal hurry and precise diagnosis of the congenital malformations of the brain, so, the prognosis, choice for the surgical treatment and need for genetic counselling are appointed.

