cleft is defined as type I ("closed lips") if there are fused clefts in cerebral mantle. In type II ("opened lips") the clefts are separated and filled with cerebrospinal connecting lateral ventricle with the subarachnoid space.

Material and methods. We retrospectively analysed data of patients hospitalized in the Clinical Pediatric Neurology Department of Hospital No 2 in Rzeszów between1998 – 2011. Clinical data and imaging exams were analysed in the group of children with confirmed schizencephaly.

Results. Schizencephaly was recognized in 32 children. Diagnosis was made in children in the ages between 2 weeks and 15 years – the majority of older children were born before the year 2000. Diagnostic imaging, most often magnetic resonance imaging was performed in all of the children. In most cases coexistence of other CSN malformations was discovered. In only one patient there were no neurological symptoms, most of the children presented different developmental disorders and neurological symptoms – most often cerebral palsy and epilepsy. In the group of children with bilateral and type II schizencephaly certain symptoms occurred more often.

Conclusions. Schizencephaly is a rare central nervous system developmental disorder, which is very often associated with other severe brain malformations and in most of the cases subsequent multiple neurological symptoms. The method of choice in diagnosis of schizencephaly is magnetic resonance, which shows the degree and type of cleft, coexisting abnormalities and allows differential diagnosis. With the increased availability of this method it is possible to recognize schizencephaly more often and earlier.

DIAGNOSTICS OF BILIARY DILATATION BY MEANS OF MAGNETIC RESONANCE CHOLANGIOPANCREATOGRAPHY

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Background. Magnetic resonance cholangiopancreatography is a relatively non-invasive imaging technique of biliary and pancreatic ducts. In MRCP technique heavily T2-weighted pulse sequences are used, in which the bile appears of high signal intensity, whilst surrounding tissues are of reduced signal intensity.

The purpose of the thesis was to evaluate the diagnostic value of magnetic resonance cholangiopancreatography in diagnostics of biliary dilatation causes.

Materials and methods. MRCP examinations of 148 patients (48 men and 100 women; the average age was 56) performed on Achieva Philips device of a magnet strength 1.5 Tesla in Provincial Hospital in Rzeszów within the period form November 2011 to April 2013 were submitted to retrospective analysis. The examined group was divided into three subgroups: patients after cholecystectomy, patients with cholecystolithiasis and patients without concrements in the gallbladder. The final reason for biliary dilatation was mainly determined on the basis of MRCP and ECPW examinations, in individual cases after intraoperative cholangiography and laparatomy.

Results. Signal losses assumed as concrements were stated in 34 cases. Mostly (in 45%) the cause of biliary dilatation was cholelithiasis in the group of patients with cholecystolithiasis. The image in MRCP examination was typical in 4 cases out of 9 malignant causes. Mostly (20%) the cause of biliary dilatation was neoplasm in the group of patients without gallstones in the gallbladder. Benign causes of biliary dilatation, apart from cholelithiasis, were stated in 16 individuals, including 4 cases in which the diagnosis was identified in MRCP, whereas in the remaining 12 cases in the final diagnosis ECPW examination turned out to be definite.

Conclusions. Magnetic resonance cholangiopancreatography enables reliable imaging of causes of biliary dilatation as long as these are deposits in the gallbladder and tumors. In cases of benign causes of biliary dilatation apart from cholelithiasis, MRCP images are often unusual and therefore the final specification of the cause of biliary dilatation is possible when this imagining method is combined with ECPW examination and additional tests.

CLINICAL AND MORPHOLOGICAL ASPECTS OF GRAY MATTER HETEROTOPIA TYPE DEVELOPMENTAL MALFORMATIONS

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Background. Grey matter heterotopia (GMH) is a malformation of the central nervous system characterized by interruption of normal neuroblasts migration between 7th and 16th week of fetal development.

The aim of the study was analysis of clinical symptoms, prevalence rate and the commonest concurrent central nervous system (CNS) developmental disorders as well as assessment of characteristic morphological changes of gray matter heterotopia in children hospitalized in our institution between the year 2001 and 2012.

Materials and methods. We made a retrospective analysis of patients' data, who were hospitalized in our institution between the year 2001 and 2012. We assessed clinical data and imaging exams in children diagnosed with grey matter heterotopia confirmed in MRI (magnetic resonance imaging).

Results. GMH occurred in 26 children hospitalized in our institution between the year 2001 and 2012. Among children with grey matter heterotopia most common clinical symptoms were: epilepsy, intellectual disability and hemiparesis.

The commonest location of heterotopic gray matter were fronto-parietal areas of brain parenchyma, mostly subependymal region.