



“dolichocolon” means unusually large length of sigmoid, that is interpreted as inherent anomaly of the colon development and can not express clinically during all life of the human. There are different opinions about formation of dolichocolon. The lengthening of the bowel is considered as a defect, or variant of development, or as anomaly. According to the data of the different authors, dolichocolon accounts for from 9 up to 11% of all anomalies of development of the colon.

The appearing clinical picture quite often simulates such diseases, as Hirschsprung’s disease, acute appendicitis, gastroduodenitis, chronic intestinal obstruction, the colon tumour.

At the present stage of the abdominal pediatric surgery development the absolute indices for surgical treatment with dolichosigmoid are not developed. Unsatisfied results and relapses of disease range from 27.3% to 45.9%.

To improve methods of surgical treatment of chronic constipations of children with dolichosigmoid.

During the period from 2009 to 2019 in the pediatric surgery clinic were examined 344 children, aged from 6 months to 17 years, with chronic constipations.

The colonoscopy, irrigoscopy and irrigography examinations were made compulsory with barium mixture.

180 children had dolichosigmoid. 29 children (16.11%), from 6 to 17 years, were operated. According to X-ray examination, it was found that 14 patients, operated on dolichosigmoid, had a high position of the colon left bend.

In assessing the X-ray examinations and clinical symptomatology two groups of patients were singled out: 1 - an isolated dolichosigmoid (15 children), 2 - dolichosigmoid combined with the colon left bend high position (14 children).

During surgical treatment, children were divided into two groups: 1- resection of the sigmoid colon with the dolichosigmoid in the traditional way; 2 - resection of the sigmoid colon with the formation of the upper sigmoid ligament based on our own methodology.

After resection of the sigmoid colon in the traditional way, periodical constipations after surgery had 18.75% of patients, abdominal pains - 37.5%, excrement smearing - 60%. In addition to operations with forming of the upper sigmoid ligament - constipations were absent; abdominal pains remained within 14.29% of patients, excrement smearing - 16.67% compared with the preoperative clinical manifestations

48.28% of children operated on dolichosigmoid, had high position of the colon left bend that is needed additional dissection of the left phreno-colic ligament. Resection of the sigmoid colon with the formation of the upper sigmoid ligament can be a way of selection of the surgical treatment of chronic constipations of children with dolichosigmoid.

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## **DEVELOPMENTAL DEFECTS AS A SIGN OF ECOLOGICAL TROUBLE**

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Various ecological factors can be cause promoting occurrence of congenital developmental defects. Due to this fact the frequency of their occurrence in the population can be an indicator of ecological trouble.

Objective of the study was to find the risks of formation of congenital defects among children whose mothers resided in locations with different geochemical characteristics. 492 autopsy protocols of newborns and fetuses died during intrauterine period or after birth during the period of 2004-2014 in the town of Chernivtsi depending on geochemical troubles associated with the places of residing of pregnant women were analyzed. The obtained results were analyzed by means of biostatistical methods using the principles of clinical epidemiology and computer packets “STATISTICA” StatSoft Inc. and Excel XP for Windows on a personal computer applying parametric and non-parametric methods of calculation and Fisher’s criterion for relative values. The risk of occurrence of developmental defects in deceased children was assessed according to the



odds ratio (OR), attributive (AR) and relative risk (RR) with determination of 95% confidential interval (95% CI).

The majority of children died during 2004-2014 were found to originate from the families residing on the territories with soils polluted by heavy metals. Thus,  $86 \pm 1,83\%$  of lethal outcomes occurred in the families residing on the territories with soils polluted by heavy metals and only in  $14 \pm 3,0\%$  ( $P < 0,05$ ) of cases pregnant women lived on the areas of a relative geochemical wellbeing. Odds ratio of children loss whose mothers lived in the areas of a relative geochemical trouble was 6,1 (95CI 3,7 - 10,04) with a relative risk of the event 37 (95CI 16,9 - 83,8) and AR – 0,72.

A relative risk of formation of developmental defects of the heart and multiple developmental defects was found to be detected in the structure of developmental defects among deceased children whose mothers resided in the areas of geochemical trouble. The peculiarities of distribution of the developmental defects rate in ecologically unfavourable areas are prevailing congenital heart defects (OR=2,13(95CI 1,05-4,31), multiple congenital heart defects OR=1,8(95CI 1,1-2,8), especially among males (OR=2,7(95CI 1,04-7,4).

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### **THE FORMATION OF THE SIDEWALLS OF THE NOSE AT THE END OF THE PREGNANCY PERIOD OF HUMAN ONTOGENESIS**

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According to WHO, 140 million babies are born annually in the world, about 4-5 million have serious anomalies, ie they are disabled. Introduction in the laboratories of the world of artificial insemination and transplantation of embryos, screening of embryonic material, ultrasound examination of fetal development, prenatal diagnostics of deviations from normal human ontogeny and other modern methods of research of medical embryology, allow to carry out antenatal infections of normal tubules. The problem of antenatal protection of the nasal area is especially acute at the present time, when the impact of environmental factors, including ecological and other nature (chemical, physical), has significantly increased. Their effect is reflected in the development of the embryo as a whole: the embryogenesis of the peripheral olfactory analyzer in particular.

To study the features of development and formation of the topography of the lateral walls of the nose at the end of the pre-fetal period of human ontogeny.

The complex of morphological methods of research (histological, morphometric, graphic and plastic reconstruction) was studied 30 series of histological preparations of the nasal area of the person in the pre-fruited period of human ontogeny.

At the end of the pre-fruited period, the lateral walls are smooth. They are represented by loosely located cells of the mesenchyme lined from the side of the nasal cavity by a tall cylindrical epithelium located on the basal membrane.

In the forebrain 18.0-20.0 mm TCD due to the protrusion of the epithelium in the adjacent mesenchyme on the wall appear depressions, which should be considered the beginning of the formation of the nasal passages and nasal shells. At this stage of development, some cells of the mesenchyme form an accumulation of arcuate shape, which should be considered the initial stage of development of the solid skeleton of the lateral walls of the nose. On the front sections, two halves of the primary nasal cavity have the form of slits up to 668 microns in height. The anteroposterior size of the primary nasal cavity is 890 microns. The nasal cavity ends with primary Hoans. The development of blood vessels continues - the separation of blood elements from the adjacent mesenchyme at the expense of the endothelium is clearer. In the pre-fetus 16.5-18.0 mm TCD begins the formation of the subepithelial vasculature. In the mesenchymal layer of the walls of the nose are found olfactory fibers (diameter of 4-8 microns), which go to the olfactory bulbs. The anterior and posterior lingual nerves are divided into secondary branches.

The cartilage plate of the middle nasal conch has a thickness of 110-130 microns. Its free end forms two well-marked protrusions, one of which is directed medially and downwards, the