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**Introduction.** Children who have undergone surgery under Hirschsprung disease (MH) come to the attention of territory physicians with postoperative enterocolitis, persistence of colostasis, obstruction and enuresis, which affects their psycho-emotional status.

**Aim of the study.** Analysis of the rate of late postoperative complications in children treated for MH in dependence of the surgical-technical variant and the spreading of the non-ganglionic area.

**Material and methods.** The study group included 84 newborns and infants hospitalized and treated in the NSPCPS "N. Gheorghiu" of PMSI IM and C for MH during the years 2007-2017. Depending on the anatomical and topographical characteristics of the affected colon segment, we defined the following locations in the non-ganglionic area: ultra-short (11.9%); rectosigmoidal (77.3%); long (6.0%) and ultra-long (4.8%). Radical treatment was provided by applying the both classical surgical methods like Duhamel method (16.6%), Swenson-Pellerin (34.5%), Soave-Leoniushkin (35.8%), total colectomy with cecrectal or ileorectal anastomosis (4, 8%), and minimally-invasive methods like trans-rectal endoanal descent (8.3%). The postoperative patient assessment scheme was provided for their supervision at 1, 3, 6, 9 and 12 months, then every 6 months until the recovery treatment was completed. The postoperative evaluation period ranged from 1.8 to 7.2 years, averaging  $4.5 \pm 2.7$  years.

**Results.** The criteria for evaluation of the remote postoperative results were the frequency of the stool, continence, urinary control, physical development (weight, height). Patients with the classical MH form corrected by Duhamel, Soave-Leoniushkin, Swenson-Pellerin, 80.4% had intestinal excretion once a day, the others (19.6%) once every 2 days or 2 times a day, without pathological clinical manifestations. Patients operated for the classical MH form had adequate control over the continence, regardless of the applied technique. Fecal excretion was recorded in 28.6% cases with a frequency of 1-3 times a day, particularly at patients with intestinal evacuation every other day. 96.6% of patients did not experience urinary dysfunction and clinical signs of neurogenic bladder. In 3.4% of children was found nocturnal enuresis corrected by physiotherapists and medical treatment. Physical development, in 89.8% of cases had a normal physical development appropriate to the age. The rest (10.2%) children experienced growth retardation and moderate weight deviations.

**Conclusions.** Estimation of postoperative results indicates that the most vulnerable in this regard, were children operated for the ultra-long MH form, especially those who underwent colonectomy with resection of the ileocecal segment.

**Key words:** Hirschsprung disease, postoperative complication, newborn

## **180. ASPIRATION OF FOREIGN BODIES IN LOWER RESPIRATORY TRACT IN CHILDREN**

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**Introduction.** Injury due to foreign body aspiration (FBA) is a common and serious pediatric emergency, requiring prompt recognition and early treatment to minimize the potentially serious and sometimes fatal consequences. FBA continues to be a cause of childhood morbidity and mortality, usually in pre-school children.

**Aim of the study.** Case assesment of FBA in children based upon age, gender, locality and level of respiratory tract lesion.

**Materials and methods.** The cohort study included 106 patients hospitalized between 2011 - 2016 in Pneumology Department, Mother and Child's Institute of the Republic of Moldova, diagnosed with FBA, confirmed via bronchoscopy performed with general inhalative anesthesia. Foreign body extraction was carried out by means of rigid bronchoscopy after thorough aspiration and prevention of mucosal bleeding. Statistics were assessed using the EpiInfo-software.

**Results.** It was established that pediatric FBA in the respiratory tract is more frequent among girls 57.5%: 95CI, 47.6 – 67.1 cases (61 girls) and 42.5%: 95CI, 32.9 – 52.4 cases (45 boys). The average age (aa) was 1.9±0.17 years, varying between 0.6–14 years. The batch was divided into 3 groups according to childhood stages: 1) the most frequent FBA was estimated in toddlers – 88.9%: 95 CI, 81.1 – 94 cases, aa 1.57±0.06 years; 2) in children > 3y.o. – 8.5%: 95CI, 4 - 15.5 cases, aa 6.4±1.1 years; 3) and it was rarely found in infants – 2.8%: 95CI, 0.6 - 15.5 cases, aa 0.76±0.11 years (F statistic = 93.5; p<0,0001). There was a prevalence of accidental FBA in children from countryside – 67%: 95CI, 57.2 - 75.8 cases, less often this event occurred in children from urban areas – 24.5%: 95CI, 16.7 - 33.8 cases and episodically – in children from municipalities (8.5%: 95CI, 4 – 15,5 cases). The majority of foreign bodies were found in the bronchial tree 89.6%: 95CI, 82.2 – 94.7 cases; without designation – in 6 – 5.7%: 95CI, 2.1 – 11.9 cases; in trachea and larynx 2 and 3 cases (1.9%: 95CI, 0.2 - 6.6 and 2.8%: 95CI, 0.6 -8).

**Conclusions.** FBA prevails in girls – 57.5%: 95CI, 47.6 – 67.1 cases. The most vulnerable age is from 1 to 3 y.o. when children are more often exposed to habitual accidents (statistic factor = 93.5; p<0,0001). There is evidence of a critical situation in the rural areas, compared to the urban ones. By localization the most frequent lodgment of foreign bodies was in the bronchi.

**Key words:** pediatrics, pneumology, foreign body, aspiration, bronchoscopy

## **181. LAPAROSCOPIC TREATMENT OF BENIGN OVARIAN MASS IN CHILDREN AND ADOLESCENTS**

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**Introduction.** Laparoscopic treatment for benign ovarian mass in adult patients are widely used and are considered as a standard treatment. At the same time, the use of laparoscopic technologies in ovarian cysts and benign tumors in pediatric patients is limited and in the literature there are presented a small series of cases.

**Aim of the study.** To assess the imminent results of laparoscopic treatment of ovarian mass in pediatric patients.

**Materials and methods.** Database analysis (n=86) with cysts and ovarian tumors in pediatric patients, selected for surgical treatment using laparoscopic technologies from 2000 to 2017. For diagnostics were used ultrasonography, computed tomography and magnetic resonance imaging.

**Results.** The average age of patients was 15.9±0.2 years (95% CI:15.54-16.39), including 5(5.8%) - premenarha and primary amenorrhea (Mayer-Rokitansky-Küster-Hauser syndrome) - 1(1.2%). The Body Mass Index was 21.9±0.4 kg/m<sup>2</sup> (95% CI:21.21-22.68). Ovarian mass (n=91) were located: from the right - 42(48.8%), from the left - 39(45.4%) and from both sides - 5(5.8%). Based on radiological data, ovarian cyst/tumor were characterized: max. size - 8.3±0.4 cm, large (> 8 cm) - 38(44.2%) and giant (> 15 cm) - 4(4.7%); "morphological" index after Jeoung HY. - 3.6±0.2 (from 1 to 9). In 9(10.5%) cases laparoscopic interventions were performed for adnexal torsion. For laparoscopic treatment were used two variants: intracorporeal interventions (I gr., n=65) and extracorporeal cyst-(tumor-) ectomy (II gr., n=21). There were performed: cyst -(tumor-)ectomy with ovarian tissue preserving - 85(93.4%), anectomy -