

## ENDOSCOPIC METHODS TO RESET THE ESOPAGIAN TRANSIT IN CHILDREN WITH ESOPAGIAN STENOSIS

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**Introduction.** Since the 15th century various methods of treatment of oesophageal stenosis have been proposed. Endoscopic stricturoplasty is one of the current methods of endoluminal expansion.

**Material and methods.** A study was conducted on a group of 30 children aged one month -17 years, hospitalized at the Pediatric Surgery Clinic, diagnosed with esophageal stenosis. The barium transit reveals dilation in the suprastenotic region; Superior digestive endoscopy finds lumen narrowing. Of the total patients undergoing dilation (30 patients), 8 (26.6%) were patients with esophageal atresia subjected to surgical esophagoplasty, two (6.6%) - with achalasia of the heart, one (3.3%) - with axial transyathal hernia complicated with esophageal stenosis. 19 (63.3%) patients had strictures developed as a result of ingestion of foreign substances and bodies with different degrees of chemical aggression. Prior to endoscopic treatment of children, anti-inflammatory, spasmolytic, oily preparations were indicated. During the endoluminal treatment, patients received spasmolytic, reparative and antibiotic indications. Dilatations were performed under general anesthesia combined with spontaneous breathing and full monitoring. Dilation procedures were performed under visual control via the videoendoscope. Two types of dilators were used: balloon dilator and Savory-Gilliard dilator. The endoluminal treatment cure consists of sessions. Interruption between sessions was 1-3 days.

**Results.** A positive result was considered when the strictures were dilated to the size corresponding to the patient's age, consistent with the published classifications. The total duration of a treatment course was at most one and a half years. The end of the treatment showed that the evolution was favorable at 66.6%. In 20% of cases, patients are still in treatment. At 3 (10%) the dilation procedure was complicated by perforation. Two out of patients with complications over 3 months restored the sessions of dilation. Surgical esophagoplasty was performed in one patient.

**Conclusion.** Endoscopic stricturoplasty has been shown to be effective, less aggressive, is the only method of endoluminal resolution of esophageal stenosis.

## DISABLING THE LOWER RESPIRATORY WAYS IN CHILDREN WITH FOREIGN BODIES

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**Introduction.** Aspiration of the foreign body is the accidental penetration by pharynx and larynx of objects or pieces of objects, food in the lower airways, which produce a state of asphyxia with vital danger to the child. **Material and methods.** A retrospective study was performed on a group of 123 children aged 11 months -16 years, hospitalized for the period 2013-2017 at the Mother and Child Institute. Diagnosis at admission: pneumonia, bronchopneumonia or foreign body suspected in respiratory tract. In order to establish the diagnosis, paraclinical methods - radiography and bronchoscopy were used. Of the total number of patients, 81 (65.8%) and 42 (34.1%) were hospitalized in an emergency. Endoscopic diagnosis and foreign body extraction were performed with two types of bronchoscopes: Karl Sorz pediatric rigid bronchoscope and flexible BF 3C 160 and BF 1TQ 170 Olympus videobronchoscope. Clinical cases of the greatest difficulty have been resolved by a mixed approach. The origin of foreign bodies: organic - 79 (64.2%), inorganic in 44 (35.7%) children. The location of foreign bodies was the following: tracheal level -1.8%, right bronchus lumen - 64.7%, and left - 33.5%. Associated decubitus lesions were present in 11.3% of cases.

Granular masses at the foreign body level were documented in 67.2% (34.2% of them were with the duration of the presence of the foreign body up to 7 days). Contact bleeding during extraction occurred in 16.7% of cases. In 4.8% cases the bronchial mucosa was not affected. In 5 cases (4.0%) the foreign body was deeply incarcerated in the bronchial wall.

**Results.** Extraction of foreign bodies by flexible videobronchoscope was obtained in 7 patients (5.6%). By rigid bronchoscope foreign bodies were extracted from 111 patients (90.2%). In 5 children (4.0%) access to visualization to the foreign body was possible via flexible videobronchoscope, but extraction – via rigid bronchoscopy.

**Conclusion.** In the pediatric prenatal extraction of foreign bodies in the lower respiratory tract, the main part belongs to rigid apparatus bronchoscopy with the selection of the age-appropriate insertion tube.