



## MORPHOLOGICAL STATE OF THE RESPIRATORY TRACT IN SCHOOL-AGE CHILDREN

*Sadikova Zumrad Shavkatovna – professor, Tashkent State Medical  
University*

*Kholdosheva Maftuna Narzulla kizi – Department of Clinical Anatomy of  
Karshi State University*

*Rajabova Gulruh Maxmarahimovna – Department of Clinical Anatomy of  
Karshi State University  
(Tashkent, Uzbekistan)*

**Abstract:** *Despite the general clinical signs characterized by choking attacks, stretching of breathing, cough with low sputum, sometimes noisy and fluttering breathing with the involvement of the respiratory auxiliary muscles, bronchoobstructive syndrome causes heterogeneous diseases. The most common causes of the development of the syndrome are bronchial asthma, obstructive bronchitis (OB), and defects in the development of the lungs and bronchi. The main importance in the pathogenesis of bronchial obstruction in respiratory infections is due to the heterogeneous activity of the bronchi in the description of inflammation, bronchospasm and mucosal hypersecretion, swelling of the mucous membrane of the bronchi, its inflammatory infiltration.*

**Key words:** *Morphological changes, control group, children, observation group.*

**Introduction.** A number of scientific studies are being conducted worldwide to optimize the indicators of postnatal ontogenetic development of the bronchial tubes in humans during the second childhood period. Of particular importance in this regard are scientific studies aimed at assessing morphometric indicators of the morphology of the walls of the trachea and pulmonary bronchi in the neonatal period, morphometric indicators of the morphology of the walls of the trachea and



pulmonary bronchi at the age of 8 years of second childhood, morphometric indicators of the morphology of the walls of the trachea.

**The purpose of the study:** Study of morphological and morphometric parameters of bronchial structure during the second childhood period (8 years).

**Research materials and methods:** In order to achieve the goal set before us and to complete the tasks, autopsical materials were obtained from the remains of 45 first-child children in the postnatal ontogenetic stage of the pulmonary bronchi without diseases of the respiratory system. Examination at the Republican Center for pathological Anatomy 2025-2026 The first adopted in the i-quarter was carried on the corpse of children in childhood. Children who died under the influence of various factors, but whose respiratory system did not change, were studied in children's corpses who died as a result of mainly heart defects and other causes that did not have diseases in the pulmonary bronchial tract. The causes of death and underlying disease have been identified in forensic medicine and pathological anatomy conclusions. The examination material was obtained from the following parts of the lungs: i.e.: trachea, right and left lungs were studied by opening the outer and inner bronchi from the lateral bronchi to the terminal bronchi. 12 bronchi of children in the second childhood (8 years old); 2. 10 bronchi of children in the second childhood (9-10 years old); 3. Bronchi of 11 children in the second childhood (11-12 years) period.

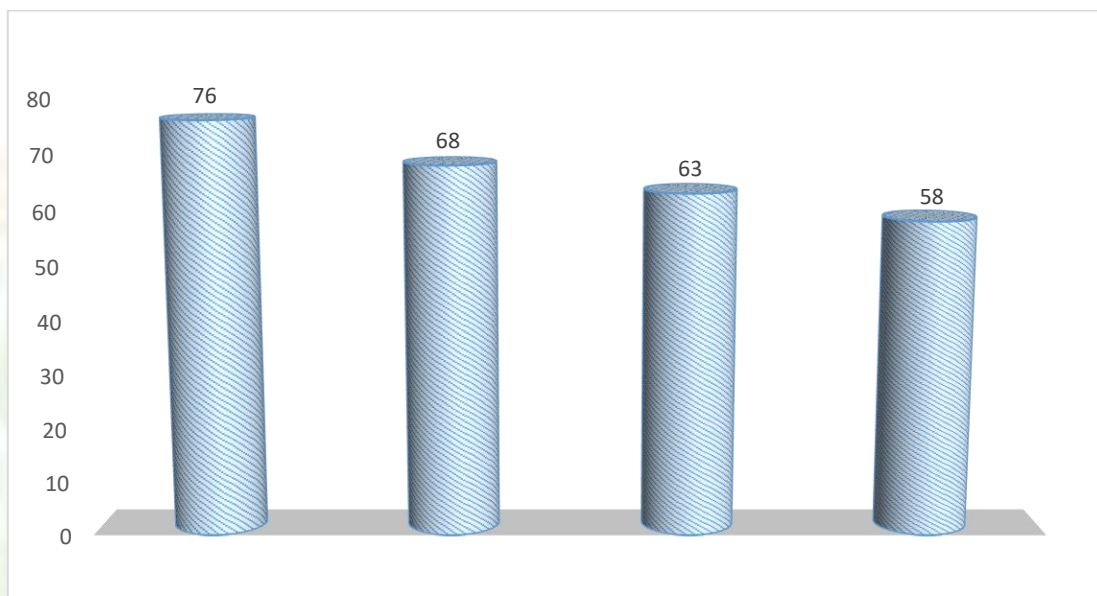
**Results of the study:** If we analyze in general the development and evolution of structural units in the layers of the wall of the bronchi in this early postnatal period, it was observed that the covering epithelium from the layers of the bronchi wall, the muscle layer and the mucous-producing glands in the mucosa of the mucous membrane grow in dynamics and thicken, then the private plate with connective While separately analyzing the morphometric indicators of the layers of the Bronx wall, it was found that the single-layer epithelium covering the surface of the mucous membrane is a formally relatively low structure at the age of 8 years, that is, due to its prismatic shape, its thickness is also small, quantitatively accounting for  $5.0 \pm 1.08\%$  of the thickness of all layers. By the age of 8, the thickness of the single-



layered prismatic epithelium also increased slightly, by an average of  $6.3 \pm 1.2\%$ , due to an increase in its volume. Based on these quantitative data, a general conclusion can be drawn that the epithelial lining of the bronchial wall thickens by about two times from the age of 8 to 9 years in the early postnatal period. It is known that it was observed that the connective tissue private plate of the mucous membrane of the bronx wall has an unformed structure at the age of one month of infancy, its intermediate substance is dominated by nardon and edema processes, its thickness is  $15.5 \pm 1.8\%$  of the thickness of all layers of the bronx wall. In the following months of the early postnatal period, it was found that cells and fibrous structures in the unformed connective tissue in the mucosal private plate were relatively Evolute, resulting in a decrease in the tumor process in the intermediate, with its relative thickness at 3 months -  $14.8 \pm 1.7\%$ , at 6 months -  $13.2 \pm 1.7\%$ , at 12 months -  $11.8 \pm 1.6\%$ . The smooth muscle floor of the bronchial wall was conversely observed to begin at one month in the early postnatal period and to become more regularly thickened in its later months by both the number and size of muscle cells, while at  $10.5 \pm 1.5\%$  in one month it was found to have thickened by 4% by the 12th month and reached  $14.6 \pm 1.5\%$ . One of the most important structures in the respiratory tract of infants during the early postnatal period is the mucous gland structures, which synthesize mucus. Our research results show that these glands grow and multiply morphologically and morphometrically during the early postnatal period, and their occupied area also increases. During the 1-month period, it was found that the bronx wall occupied a third of the area of all its layers,  $31.0 \pm 2.3\%$  of the space. It was found that the next period of examination, that is, in the 3rd month, reached  $32.4 \pm 2.3\%$ , in the 6th month,  $34.6 \pm 2.3\%$ , and in the 12th month,  $36.4 \pm 2.4\%$ . Thus, in general, by the end of the early postnatal period, an expansion of the area by 5.5% was observed. It was found that the relative area occupied by the cartilage plates in the bronchial wall was  $38.0 \pm 2.4\%$  of the area of all layers in the first month of the study. the area of the togai In the following months of the early postnatal period, both cells and intermediate chondroid matter in the lower sac were found to have condensed and



shrunk the area they occupied as they were able to locate and differentiate Tacoma, and by the 12th month it was found to occupy  $29 \pm 2.2\%$  of the space. runk the area they occupied as they were able to locate and differentiate Tacoma, and by the 12th month it was found to occupy  $29 \pm 2.2\%$  of the space.



**Conclusion:** The reason why the togai people occupy a relatively wide area is that when histological examination of it, it was found that chondrocyte cells in the composition did not find age and good evolution, as a result of which it was relatively large, since the chondroid substance between it was relatively light-colored and the swelling process prevailed.

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