# MORPHOLOGICAL CHANGES IN THE BRONCHI IN CHILDREN AGED 1 YEARS

**Sadikova Zumrad Shavkatovna**

professor, *Tashkent state medical university*

*(Tashkent, Uzbekistan)*

**Uroqova Nigora Nurilloevna**

assistant, *Qarshi City Turan University*

*(Tashkent, Uzbekistan)*

**Abstract:** The lungs of mammals are formed by a branched system, ending in gas exchange units known as alveoli. Although the total amount of atsinus does not change the development of the lungs of rats in the moboyne of the entire postnatal period, the lungs continue to develop even after birth, in which the area of the surface of the alveoli increases significantly during the postnatal period.

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

**Introduction.** The upper respiratory tract includes the nasal cavity, the nasal and oral part of the khalkum, the lower respiratory tract include the hiccups, trachea (throat), bronchi, and lungs. It has a tubular structure characteristic of its activity, keeping its cavity at the same level as it is a bone and a humerus in the respiratory wall. The inner surface of the respiratory tract contains glands that synthesize a slime substance consisting of a mucous membrane, the surface of which is covered with a hovering epithelium.

Therefore, the mucous membrane, in combination with its protective function, purifies the air and, warming up, humidifies the air in the airway.

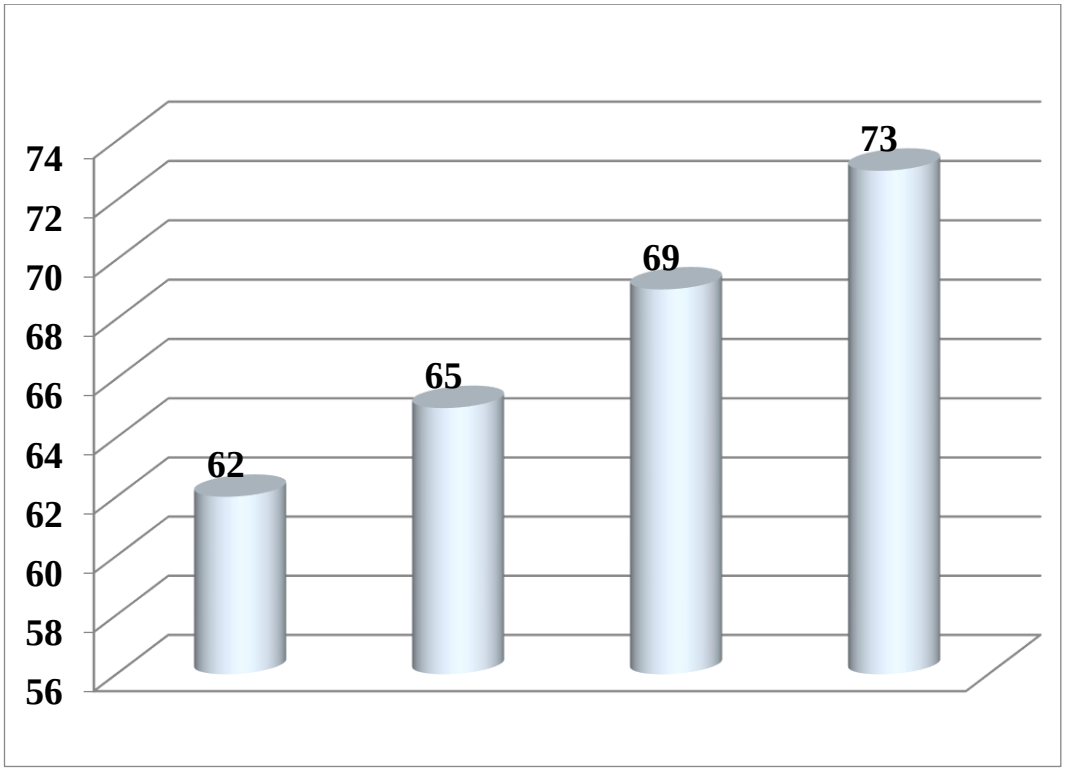
**The purpose of the study:** Analysis of morphological changes in the bronchi in children aged 1 years.

**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 patalogical Anatomy 2024-2025 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.

**Results of the study:** 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 years - 14.8±1.7%, age 4 -13.2±1.7%, age 5 - 11.8±1.6%. The smooth muscle layer of the bronchial wall was conversely observed to begin at one month in the early postnatal period and become more regularly thickened in its later months as a result of both the number and size increases of muscle cells, from 10.5±1.5% in one month to 4% by the age of 5, and reached 14.6±1.5%. In the early postnatal period of children, one of the structures in the respiratory tract

wall that performs another important function is the mucous gland structures that synthesize a mucus substance.

**It was found that the mucous glands increased by 1.2 times during the first year of life**




Our research results show that morphologically, as well as morphometrically, these glands increase and increase in the dynamics of the early postnatal period, as well as the area occupied.n the early postnatal period of children, one of the structures in the respiratory tract wall that performs another important function is the mucous gland structures that synthesize a mucus substance. Our research results show that morphologically, as well as morphometrically, these glands increase and increase in the dynamics of the early postnatal period, as well as the area occupied. At the age of 4 years, it was found that the bronx wall occupied a third of the area of all its layers, that is, 31.0±2.3% of the space. It was found that the next period of examination, 32.4±2.3% at age 3, 34.6±2.3% at age 4, and 36.4±2.4% at age 5. Hence, overall it was observed that the area expanded by 5.5% by the end of the early postnatal

period.It was found that the next period of examination, 32.4±2.3% at age 3, 34.6±2.3% at age 4, and 36.4±2.4% at age 5. Hence, overall it was observed that the area expand.

It was found that the tissue of the lower platelets of trachea became denser, the lower platelet material increased and the cells decreased, the chondrocytes contained in it formed at a higher level than in previous periods, decreased compared to the intermediate chondroid substance, the connective tissue Tufts around it became denser. The submucosal layer was found to be expanded, thinned, and to contain an increased number of connective tissue fibers and cells compared to the previous period. The mucous membrane is relatively thick, with an epithelial single-layer structure that covers its surface. The mucous membrane of the trachea was preserved thin, thin, the glandular cells in them, well developed in comparison with the previous period, were slightly swollen and enlarged, the covering epithelium was observed to contain a large number of smooth epithelia with a surface relative to the ciliated epithelium.he mucous membrane is relatively thick, with an epithelial single-layer structure that covers its surface. The mucous membrane of the trachea was preserved thin, thin, the glandular cells in them, well developed.

**Conclusion:** 1.Deep layers of the private plate were found to contain smooth muscle cells consisting of a single tuft located in a circular direction. It is followed by smooth muscle cell Tufts, in the deep layers of which a row is located. The thickness of the Tufts varied, and it was observed that fine connective tissue interstititium occupied a place between them.

**References**

1. Akhmedova S.M., Nortaeva N.A., Nortaev A.B. Morphological changes in the teeth of adolescent children with hypotireosis // Collection of materials of the scientific and practical conference with international participation,

dedicated to the 100th anniversary of the Tashkent Medical Academy, "100 years of the Tashkent Medical Academy – the era of great achievements and discoveries". Tashkent, 2022 -P. 199-200

2. Nortaeva N.A., Akhmedova S.M., Nortaev A.B. Morphological changes in the teeth adolescent children with hypotireosis // Problems of biology and medicine. - Samarkhand, 2022. - P 270. ISSN 2182-5674, https://doi.org/10.38096/2181-5674.2022

3. Nortaeva N.A., Nortaev A.B. Morphological changes in teeth against the background of experimental hypothyroidism // Topical issues of modern scientific research.-Dushanbe 2022.-P 168.

4. Nortaeva N.A., NortaevA.B. Morphological changes in the tooth in experimental hypothyroidism // Issues of innovative development of science, education and technology. - Andijan, 2022.-P 273-275

5. Nortaeva N.A., Nortaev A.B., Akhmedova S.M. To study the morphological changes in the tooth against the background of experimental hypothyroidism // Current problems of microbiology. - Tashkent, 2022 -P. 148-152

6. Nortaeva N.A. Morphological changes in teeth as a result of malnutrition in preschool children // Proceedings of the conference dedicated to the 95th anniversary of academician, morphologist, scientist Komiljon Zufarov. - Tashkent, 2021 -P. 34-36

7. Nortaeva N.A., Akhmedova S.M. Morphological changes in the dental in experimental hypotireosis // Collection of materials of the scientific and practical conference of young scientists with international participation, dedicated to the 100 th anniversary of the Tashkent Medical Academy, «innovative approaches in medicine». Tashkent, 2022 -P. 51

8. Nortaeva N.A., Akhmedova S.M., Nortaev A.B. Anthropometric indicators of the maxillofacial system in school–aged children with hypothyroidism // Modern scientific research topical issues, achievements and innovations.

Current scientific issues, current affairs, achievements and innovations. Penza, 2023 –P. 153. ISBN 978-5-00173-707-0

9. Nortaeva N.A., Akhmedova S. M., Nortaev A.B., Rajabov B.M. Changes in the face-jaw system of experimental hypothyroidism // Texas Journal of Medical Science https://zienjournals.com 2023 –P. 61-64 ISSN NO: 2770-2936

10. Nortaeva N., Akhmedova S., Berdiev O., Anthropometric dimensions of the maxillofacial system in children with hypothyroidism aged 8-16 year // Journal of Medicine and Innovations www.tsdi.uz 2023 –P. 230-235 ISSN 2181-1873

11. Nortaeva N.A.,Akhmedova S.M.,Nortaev A.B, Effects of hypothyroidism on the maxillofacial system // Uzbek journal of case reports 2023 –P.126, Том 3. https://doi.org/10.55620/ujcr.3.sp.2023

12. 1. Usmanov R.Dj., Gulmanov I.D., Nortaev A.B. Development and prevalence of periodontal diseases in workers working with chemical paints // 100 years of the Tashkent Medical Academy – the era of great achievements and discoveries – 2022. P-244.

13. 2. Saidov A.A. Periodontal disease and its prevention in workers of the textile industry // Monograph-2020. 134 p.

14. 3. Volozhin A.I., Filatova E.S., Petrovich Y.A. and others. Evaluation of the state of the periodontal by the chemical composition of the environment of the oral cavity // Dentistry. -2000. №1- P. 13-16.

15. 4. Nortaev A.B., Rajabov B.M., Berdiev O.V. Oral inflammation in light industry workers // Texas Journal of Medical Science ISSN NO: 2770-2936. -2023. P-84-86. https://zienjournals.com

16. 5. Nortaev A.B.,Usmanov R.Dj.,Nortaeva N.A. Periodontal disease and its complications in 21-30-year-old chemical paint workers // Journal of medicine and innovations ISSN 2181-1873 2023.P-215-220 www.tsdi.uz

17. Nortaev A.B.,Usmanov R.Dj., Berdiev O.V. Use of cefixime in the treatment of periodontal disease in industrial employees // Farmaecutil journal №3, 2023 P. 77-80 UDK: 616.314.18-002.4-885:615.331:323.329

18. Nortaev A.B.,Usmanov R.Dj.,Ibragimova Sh.A. Severe Consequences of the Development of Periodontal Disease in the Example of Employees Working in Light Industrial Plants // Texas Journal of Medical Science ISSN NO: 2770-2936 https://zienjournals.com Date of Publication:06-05-2023 P-110-113

19. Nortaev A.B., Usmanov R.Dj., Berdiev O.V. Periodontal disease and its complications in 21-30-year-old chemical paint workers // Journal of oral medicine and craniofacial research Samarkhand - 2023. P.-21

20. Nortaev A.B., Akhmedova S.M., Usmonov R.Dj. Periodontal disease and its development in the case of employees of chemical shops // Uzbek journal of case reports Part 3. Samarkhand - 2023. P.-130

21. Nortaev A.B., Usmanov R.Dj., Rajabov B.M. The level of periodontal disease in 20-28-year-old textile industry workers // 77th International Scientific and Practical Conference "Achievements of Fundamental, Applied Medicine and Pharmacy". Samarkhand - 2023. P.-525

22. Nortaev A.B.,Usmanov R.Dj.,Gulmanov I.Dj. Etiology of the development of periodontal disease in workers of the manufacturing industry // "Current aspects of the pathogenesis of diseases caused by environmental factors" Materials of international scientific and practical conference Tashkent – 2023. P-11-12