E CONF SERIES

International Educators Conference
Hosted online from Toronto, Canada
Website: econfseries.com 7th November, 2025

CHANGES IN THE RESPIRATORY SYSTEM IN CHILDREN OF DIFFERENT AGES

Sadikova Zumrad Shavkatovna – Professor
Islamova Gulnara Raufovna – Associate Professor
Bakieva Muhabbat Tursunkulovna – Assistant
Ruzmetova Rano Alisherovna - Master's Student
Department of human anatomy and OSTA
Tashkent state medical 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.

Keywords: 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

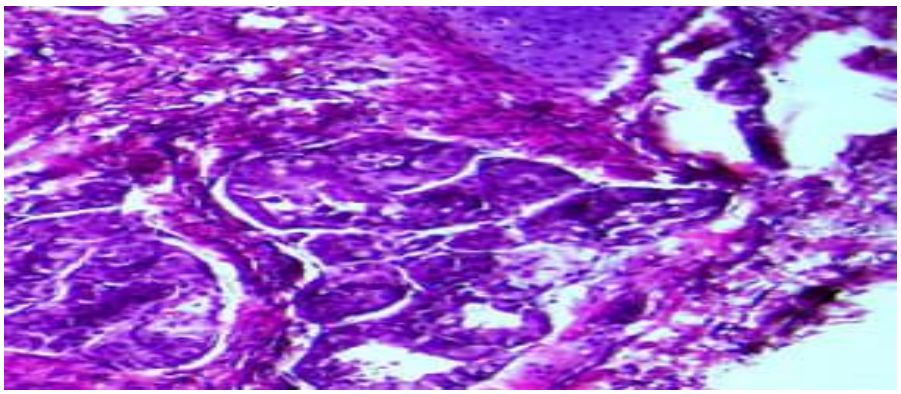
Study of changes in the respiratory organs of children of different ages.

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 55 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.

Results of the Study

In children, when they reach age, the large tract of the respiratory system, that is, the trachea, enters a cylindrical shape from a funnel-shaped one. The mucous membrane of the trachea is thin compared to other parts of the bronchial tract, the covering epithelium contains more smooth surface epithelium compared to the ciliated epithelium, 1.5 times more than in scientific literature data.n children, when they reach age, the large tract of the respiratory system, that is, the trachea, enters a cylindrical shape from a funnel-shaped one. The mucous membrane of the trachea is thin compared to other parts of the bronchial tract, the covering epithelium contains more smooth surface epithelium compared to the ciliated epithelium, 1.5 times more than in scientific literature data.



Increased and dense distribution of connective tissue bundles in the tracheal wall It is painted in the hemotoxilin-eosin method. Enlarged image in size 10x40

Our examination also found that the lining epithelium of the tracheal mucosa is relatively thin and covered with a single layer of prismatic epithelium. The covering epithelium was observed to have a surface smooth epithelial number. The two epithelial cells were found to be relatively small in height, prismatic in shape, with a more neutral Core, most of which did not touch the basal floor, being round and oval in shape. It was found that the basal membrane is made up of thin fibrous structures and is joined by a private plate with connective tissue underneath. Specific plate tissue has been confirmed to contain infiltration consisting of lympho-histiocytic cells. Deep layers of the private plate were found to contain smooth muscle cells consisting of a single tuft located in a circular direction.t was found that the basal membrane is made up of thin fibrous structures and is joined by a private plate with connective tissue underneath. Specific plate tissue has been confirmed to contain infiltration consisting of lympho-histiocytic cells. 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 with a row in their deep layers (see Figure 3.16). The thickness of the Tufts varied, and it was observed that fine connective tissue interstititium occupied a place between them. Under the muscle Tufts are the private glands of the trachea, the difference from previous periods is that the glandular yachts are relatively large, the cells are obese and the apical part is in a vacuolated state. Mountain peoples are surrounded by a veil of connective tissue in a dense state.he thickness of the Tufts varied, and it was observed that fine connective tissue interstititium occupied a place between them.

Conclusion:

1. There are serious-mucous glands located in the mucous membrane, compared to the trachea, it was observed that they have a low number and immature structure.

References

1. Akinshin I.I., Sinelnikova Ye.V., Chasnыk V.G., Kornishina T.L. Issledovanie vzaimosvyazi ultrazvukovыx fenomenov legkix s pokazatelyami gazoobmena u novorojdennыx detey // Vizualizatsiya v meditsine. - 2020. - T. 2. № 2. - S. 8-17.

2. Altit G., Dansea A., Renaud K., Perreault T., Lands L.S., Santanna G. Patofiziologiya, skrining i diagnostika legochnoy gipertenzii u detey s bronxolegochnoy displaziey (obzor literaturы) // Neonatologiya: novosti, mneniya, obuchenie. 2017. № 1 (15). S. 24-38.
3. Amirova V.R., Valiulina A.Ya., Zalalova A.A., Rыbalko O.V. Sostoyanie zdorovya detey pervogo goda jizni, rodivshixsya nedonoshennыmi // Meditsinskiy vestnik Bashkortostana. 2019. T. 14. № 1 (79). S. 69-77.
4. Basiy R.V., Vasilev V.A., Zdixovskiy I.A., Dovgyallo Yu.V., Beshulya O.A., Selivanova Ye.S. Anatomiya legkix // Vestnik gigienы i epidemiologii. - 2018. - T. 22. № 4. - S. 87-90.
5. Batman Yu. A., Polyakov K.V., Bessonov D. A., Pavlyuchenko V. V. Morfologicheskie osobennosti legochnoy tkani u nedonoshennыx detey, obuslovlennыe bronxolegochnoy displaziey // Neonatologiya, xirurgiya i perinatalnaya meditsina. - 2012. - T. II, №1(3). – S.59-64.