



---

## **METHODS OF INVESTIGATION OF THE RESPIRATORY SYSTEM IN CHILDREN**

Umarova T. A.

Assistant of the department of clinical laboratory  
diagnosis with the course of clinical laboratory diagnostics of PGD;

Isomadinova L. K.

Assistant of the department of clinical laboratory  
diagnosis with the course of clinical laboratory diagnostics of PGD;

Bobomurodova M.

Cadet of the department of clinical laboratory diagnosis with the  
course of clinical laboratory diagnostics of PGD; Samarkand  
state medical university Samarkand, Uzbekistan

Respiratory pathology in children occupies one of the first places in the general paediatric morbidity. Timely diagnosis, effective treatment and prevention of respiratory diseases are impossible without knowledge of anatomo-physiological features of the respiratory organs and thorough examination of the child [10,11].

**Keywords:** respiratory tract organs, influenza, nasal polyps, runny nose, cough;

A respiratory examination usually begins with a sequential questioning of the mother or child. Try to find out if there is a runny nose and its nature. Serous or mucous-serous discharge is observed in acute respiratory viral infections and sometimes in allergic rhinitis. Mucous or mucopurulent discharge is characteristic of measles and is observed later in the disease influenza or adenovirus diseases, as well as in maxillary sinusitis. An admixture of blood (purulent discharge) is noted in nasal diphtheria. Nasal bleeding is characteristic of haemorrhagic diathesis, leukaemia, hypoplastic anaemia, nasal polyps, rheumatism, and also noted in peculiarities of the structure of the vascular plexus of the nose. Dry runny nose with snoring breath in



## **International Conference on Modern Science and Scientific Studies**

Hosted online from Madrid, Spain

Website: [econfseries.com](http://econfseries.com)

20<sup>th</sup> December, 2024

infants is suspected of chronic lesions of the nasal mucosa in congenital syphilis [4,5,6].

Cough is one of the most characteristic signs of respiratory damage. The most typical cough in whooping cough. It runs paroxysms (attack-like) with reprisals (prolonged, high breaths) and is accompanied by facial redness and vomiting. Cough paroxysms are more often observed at night. The cough in laryngeal lesions is usually dry, rough and barking. It is so characteristic that it makes it possible to suspect a laryngeal lesion (laryngitis or croup) from a distance. The cough in tracheitis is rough (as in a barrel). In bronchitis, the cough can be both dry (at the beginning of the disease) and moist, with separation of sputum. In bronchial asthma, usually separates thick sputum. In inflammation of the lungs in the first days of the disease, the cough is more often dry, in the following days it becomes moist. When the pleura is involved in the process, the cough becomes painful (croup pneumonia, pleurisy). To determine whether there is a dry or wet cough, it is necessary to observe the child, whether he does not swallow sputum. Abundant emission of sputum (purulent) with a full mouth in small children is observed when emptying an abscess or suppurative lung cyst into the bronchi. In older children a lot of sputum occurs in chronic pneumonia, when there are already bronchiectasis. Sometimes the change in cough during the course of the disease is of great importance. Thus, a rare cough at the beginning of the disease is observed in acute respiratory infections. If it then becomes more frequent and moister, it may be a sign of bronchiolitis and pneumonia. When asking about it, it is important to find out whether the body temperature was elevated and whether there were no chills (in small children, the equivalent of chills is vomiting). Sometimes in pneumonias there is abdominal pain (abdominal syndrome), which leads to suspect appendicitis and refer the child to a surgeon for consultation. Only careful examination and observation make it possible to reject the diagnosis of appendicitis and avoid surgery. From the anamnesis it is necessary to find out whether there were pulmonary diseases that preceded the present, and if there were - the degree of recovery from them. This is important in the diagnosis of bronchial asthma, chronic pneumonia. Great, and sometimes decisive importance in the diagnosis of lung lesions acquires clarification of contact with tuberculosis patients in the family and flat [9,10,11].



## **International Conference on Modern Science and Scientific Studies**

Hosted online from Madrid, Spain

Website: [econfseries.com](http://econfseries.com)

20<sup>th</sup> December, 2024

Examination. At external examination it is necessary to note cyanosis, which can be permanent, local or general. The greater the respiratory failure and lower the oxygen tension, the more pronounced and widespread the cyanosis. Cyanosis of the skin, mucous membranes of the lips and tongue appears when arterial blood oxygen saturation falls. Cyanosis in lung lesions is usually increased during crying, because the delay in exhalation of breath results in an even greater decrease in oxygen pressure. In addition, pulmonary cyanosis has a specific localisation (around the mouth, eyes). In small children (up to 2-3 months of age) in the corners of the mouth, under the tongue in bronchiolitis and pneumonia can be seen frothy discharge. The occurrence of this symptom is explained by the penetration of inflammatory exudate from the respiratory tract into the oral cavity (the oral cavity of a healthy child in the first 2-3 months is relatively dry, as he does not yet have salivation). When examining the nose, it is possible to note the discharge (serous, mucous, mucopurulent, mucopurulent, bloody, bloody) and difficulty breathing through the nose [7,8].

Nasal Examination Technique. The nurse or mother takes the child wrapped with arms. The examiner, tilting the child's head, lifts the tip of the nose and examines the entrance to the nasal cavity. If the entrance to the nasal cavity is blocked with crusts, they are removed with a cotton swab moistened with Vaseline oil. With this careful examination determine the nature of the discharge from the nose, in addition, you can see a foreign body or diphtheria plaque in the anterior part of the nose, as well as assess the state of the vascular plexus of the nose. Depending on the nature of the discharge, rhinitis is distinguished as serous, mucous, mucopurulent and haemorrhagic. Rhinitis is most often one of the symptoms of acute respiratory viral infection (adenovirus, parainfluenza and influenza), observed in measles. Nasal discharge is characteristic of nasal diphtheria or foreign bodies. Congenital syphilis is characterised by so-called snoring breath. During examination, attention is paid to the child's voice, which often changes when the larynx and vocal folds are affected [1,2,3,4,5,6].

Laryngitis is clinically manifested by a rough barking cough and voice changes. A rough low voice is one of the signs of myxedema. Nasal tone of voice occurs in chronic runny nose, adenoids, pharyngeal abscess, etc. The appearance of nasality



## International Conference on Modern Science and Scientific Studies

Hosted online from Madrid, Spain

Website: [econfseries.com](http://econfseries.com)

20<sup>th</sup> December, 2024

in diphtheria of the pharynx and encephalopathies indicates paresis of the palatine curtain. In preschool and school-age children with adenoid vegetations, the face acquires a characteristic appearance. It is pale, puffy, with an open mouth, raised upper lip and upturned nose, often noted improper bite. Characteristic of the appearance of frequent coughing child (with whooping cough and chronic nonspecific lesions of the lungs). In such children - pale, pasty face and eyelids (due to impaired lymphatic outflow - lymphostasis), cyanotic mucous membrane of the lips, skin veins swollen, there may be haemorrhages in the conjunctiva and subcutaneous tissue. When examining the oral cavity, attention should be paid to the condition of the pharynx and tonsils. In children of the first year of life, the tonsils usually do not extend beyond the anterior glands. In children of preschool age is usually observed hyperplasia of lymphoid tissue and tonsils when examined go beyond the anterior pharynx. They are dense and do not differ in colour from the mucous membrane of the pharynx. Children often have various inflammatory processes - sore throats [12,13].

### References

1. Kudratova Z. E. et al. Current modern etiology of anaemia //Open Access Repository. - 2023. - T. 10. - №. 10. - C. 1-4.
2. Burxanova D. S., Umarova T. A., Kudratova Z. E. Acute myocarditis linked to the administration of the COVID 19 vaccine // Central Asian Journal of Education and Innovation. - 2023. - T. 2. - №. 11. - C. 23-26.
3. Kudratova Z. E. et al. Atypical microflora etiologii li utkir obstructive bronchitislarning y ziga khos klinik kechishi //Research Focus. - 2022. - T. 1. - №. 4. - C. 23-32.
4. Kudratova Z. E., Normurodov S. Etiological structure of acute obstructive bronchitis in children at the present stage - Thematics Journal of Microbiology, 2023. P.3-12.
5. Kudratova Z. E., Tuychiyeva S. K. Atipik mikroflora etiologiyali o'tkir obstruktiv bronxitlar etiopatogenezining zamonaviy jixatlari. Research Focus, 2023, B. 589-593.



## International Conference on Modern Science and Scientific Studies

Hosted online from Madrid, Spain

Website: econfseries.com

20<sup>th</sup> December, 2024

6. Kudratova Z. E., Karimova L. A. Age-related features of the respiratory system. Research Focus, Tom 2, P. 586-588.
7. Isomadinova L. K., Daminov F. A. Modern laboratory diagnosis of chronic pyelonephritis in children // Journal of new century innovations. - 2024. - T. 49. - №. 2. - C. 112-116.
8. Isomadinova L. K., Daminov F. A. Glomerulonefrit kasalligida sitokinlar ahamiyati // Journal of new century innovations. – 2024. – T. 49. - №. 2. - C. 117-120.
9. Isomadinova L. K., Qudratova Z. E., Shamsiddinova D. K. Samarqand viloyatida urotiliy kasalligi klinik-kechishining o'ziga xos xususiyatlari // Central Asian Journal of Education and Innovation. - 2023. - T. 2. - №. 10. - C. 51-53.
10. Isomadinova L. K., Qudratova Z. E., Sh B. F. Virusli gepatit b fonida Covid-19 ning klinik labourator kechish xususiyatlari // Journal of new century innovations. - 2023. - T. 30. - №. 3. - C. 60-65.
11. Isomadinova L. K., Yulayeva I. A. Buyraklar kasalliklarning zamonaviy diagnostikasi // Central Asian Journal of Education and Innovation. - 2023. - T. 2. - №. 10 Part 3. - C. 36-39
12. Kudratova Zebo Erkinovna, Tamila Abdufattoevna Umarova, & Sirojeddiova Sanobar. (2024). Modern types of immunoenzyme analysis methods old problems. Web of Discoveries: Journal of Analysis and Inventions, 2(6), 67-70.
13. Nabieva F.S., Musaeva F.R. Laboratory diagnostics of acute glomerulonephritis // Journal of new century innovations. - 2023. - T. 30. - №. 3. - C. 150-152.