



ANATOMY AND PHYSIOLOGY OF TONSILS

Abstract:

The immune system is made up of many parts that are interconnected. Tonsils are one of the important elements responsible for the formation of the immune response. They repel attacks from pathogens that try to enter the body. Since the anatomy of the tonsils is well studied, there are no problems with identifying pathologies of the peripheral organ of the immune system and their treatment. Previously, they were cut out, but now doctors rarely prescribe surgical treatment.

Keywords:

Tonsils, tonsils, organ, pharynx, mucous membrane, shape of tonsils.

Information about the authors

*Nishanbayeva F. M, Mansurova D. A.
Department of ENT Organs in Anatomy at Alfraganus University*

Introduction

Tonsils (or tonsils) are collections of lymphoid tissue in the throat. They are the first filter for microbes that enter the body from food and air.

The tonsils unite with accumulations of lymphoepithelial tissue, follicles, forming a Waldeyer-Pirogov ring.

When examined independently using a mirror, you can only see the palatine tonsil. If the pharyngeal region is inflamed, a small part of it will be visible. An in-depth examination can be carried out by a doctor with a special instrument.

The organ is located deep in the mucous membrane, at the borders of the pharynx, oral cavity, and nasopharynx. To put it simply, the tonsils are located between the palate and the tongue.

The structure of the tonsils is complex. They have a porous structure. Their surface is strewn with many small depressions. The holes trap pathogens. The average number of grooves on each tonsil is 15–20.

Recessed structure:

- The inner part, the surface of which is covered with follicles. They are needed to produce immune cells called lymphocytes.
- The tonsils are covered with epithelium on top.
- At the junction of the organ with the pharynx there is fiber.

The tonsils are small but contain a large number of nerve cells. Therefore, when they become inflamed, severe pain appears.

Dimensions and shape

The size and shape of the tonsils depend on their type and location:

- Palatal. They have an oval shape. Size for newborns is 10x9x2.1 mm. For adults - 30x20x20 mm (maximum dimensions).



- Pharyngeal. Round plates, on the surface of which there are folds of the mucous membrane (up to 8 pieces). The folds reach the nasopharynx cavity. These tonsils are most developed in newborns. As a person grows older, they begin to decrease.
- Linguistic. Ovoids that have uneven surfaces. There are folds at the top. In newborns, the lingual tonsils are well developed, measuring 6x9, but with age they gradually decrease.
- Pipe. A paired organ that is expressed in newborns and children under 7 years of age. Average dimensions - 7.5x3.5 mm. After 7 years they begin to atrophy and become almost invisible.

The exact size and shape of the organ depends on the characteristics of the body, age, and the presence of congenital or previous pathologies.

Study

If you experience discomfort in your throat, difficulty breathing, pain in talking or eating, you should consult a doctor. To identify pathologies, the following is prescribed:

- Pharyngoscopy - visual examination of the pharyngeal cavity. To carry it out, the doctor needs good natural lighting, instruments, and dressings. The main instruments are a thin metal or plastic spatula, a nasopharyngeal speculum, the diameter of which can reach 10 mm. The patient must sit opposite the doctor. He opens his mouth wide and breathes through his nose. To suppress the gag reflex, the doctor may lubricate the mucous membranes with an anesthetic. The doctor carefully places the mirror into the throat so as not to touch the walls. At a certain level, he stops, turns the instruments in different directions to examine places of interest.
- Rhinoscopy - study of the condition of the nasal cavity. To carry out the procedure, a nasopharyngeal speculum, nasal speculum, and nasal dilators are used. The technique is performed under good artificial lighting. First, the doctor opens the nostrils with dilators, and then examines them using a directed beam of light and a special mirror.

Another research option is ultrasound. With its help, you can see neoplasms, determine the exact size of the organ, and the presence of inflammatory processes.

Pathologies

Pathologies can be divided into 3 large groups:

- Physical, thermal, chemical damage. This could be injuries, burns from hot food, air, damage from chemicals or acids entering the throat cavity.
- Foreign bodies. Such deviations include the ingress of solid food, which is embedded in the tissue. There is acute pain when swallowing. You can remove them using tweezers or special forceps. After removing the foreign body, the throat should be rinsed with a disinfectant solution.
- Developmental anomalies. More often these are congenital pathologies or growth disorders of the tonsils. Some of them do not require treatment.

Conclusion

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