

Method of expression of certain bacterial microflora mucosa olfactory area

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ABSTRACT

The article is devoted to the actual problem - the development of new express diagnostic methods, based on which a doctor-otolaryngologist can quickly and efficiently determine a violation of smell. The work is based on the methods of processing and analysis of medical images and signals. We have also identified informative indicators of endoscopic image of the olfactory region of the nasal mucosa of the upper course.

Keywords: endoscope, image, rhinomanometry, signal

1. INTRODUCTION

Breathing provides gas exchange in the body at the cellular level, so it is very important that this process was correct. Diseases of the upper respiratory tract can lead to serious pathological changes in the body, such as problems with the gastrointestinal tract due to dysfunction of the sense of smell.

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In the study of the sense of smell may be necessary to consult the patient at different specialists - neurologists, neurosurgeons, endocrinologists, psychiatrists, and others. In particular, this applies to situations where a patient with a clear breach of smell is no conclusive clinical signs of disease of the nose and paranasal sinuses. It is well known that the results of just one research method cannot be objective, so often for making diagnostic decisions carried out a set of measures for the registration and analysis of medical data.

Therefore It is necessary to develop express-method, which would be an additional method of research in the diagnosis of ENT diseases and allow to handle different data types (image and signal) for making an objective decision doctor^{1,6}.

2. EXPERIMENTAL RESULTS

To solve this problem we had formed a group of 52 patients with chronic allergic and infectious rhinitis aged from 18 to 65 years, we have watching this group. This group was roughly divided into 2 subgroups. The first consists of 25 people with allergic rhinitis current form, the second includes 27 patients with infectious form.

For the diagnosis and differential diagnosis of these forms of the disease performed were total and special investigations. Common clinical studies included: clarification of complaints and anamnesis, ENT examination, inspection allergist, clinical blood and urine tests. To eliminate the pathology of the paranasal sinuses was performed radiography of the paranasal sinuses; with inadequate imaging structures of the lateral wall of the nasal cavity, ethmoidal labyrinth and maxillary and frontal sinuses, computed tomography was performed.

The collection, processing and analysis of data was carried out through a system of analysis of the nasal mucosa. Processed endoscope introduction to the overall nostril with summing up to the distal portion of the olfactory mucosa of the area with the most characteristic changes in the characteristics of the color (cyanotic, blood circulation and architectonic). 10 minutes before the investigation into the nasal cavity, if necessary (with an increase in nasal turbinates and the narrowness of the common nasal passages) were put tampons with anesthetic and a little adrenaline.