



e-ISSN: 2319-8753 | p-ISSN: 2347-6710

IJRSET

International Journal of Innovative Research in
SCIENCE | ENGINEERING | TECHNOLOGY

INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 10, Issue 12, December 2021

ISSN INTERNATIONAL
STANDARD
SERIAL
NUMBER
INDIA

Impact Factor: 7.569

9940 572 462

6381 907 438

ijirset@gmail.com

www.ijirset.com



Modern Examination and Treatment of Rhinosinusitis Together in Patients with Upper Respiratory and Chronic Obstructive Lung Disease

Saliokhunova Kh.O.,¹ Shaykhova Kh, E.²

Assistant of the Department of Otorhinolaryngology, Andijan State Medical Institute, Andijan, Uzbekistan¹

Doctor of Medical Sciences, Professor, Tashkent Medical Academy, Tashkent, Uzbekistan²

Resume. Chronic obstructive pulmonary disease (COPD) is one of the leading causes of morbidity and mortality in the modern world, leading to very significant economic and social damage, the level of which is constantly increasing. According to GOLD-2011, the identification and elimination of risk factors is an important step in the prevention and treatment of COPD.

One of the reasons affecting the frequency of exacerbations may be chronic foci of inflammation of the upper respiratory tract (UPD).

Therapeutic correction of these chronic foci of inflammation can have a positive effect on the course of the underlying disease, reducing the number of episodes of exacerbation of COPD.

This article discusses the idea of chronic obstructive pulmonary disease and concomitant rhinosinusitis, their modern methods of diagnosis and treatment.

Key words: rhinosinusitis, comorbidity, chronic obstructive pulmonary disease.

Relevance. The results of medical statistics convincingly indicate an increase in the number of diseases of the nose, paranasal sinuses (55) and bronchopulmonary pathology [2]. The close anatomical and physiological connections between the upper and lower airways are the reason that the increase in the number of rhinosinusitis is keeping pace with the increase in the number of pulmonary diseases [5] and, in particular, chronic obstructive pulmonary disease (COPD). This tendency cannot be broken, even despite the joint efforts of leading experts from all over the world [1,4]. COPD ranks 4th in the world as a cause of death in the age group over 45 years old, and the number of deaths of the disease continues to increase [6].

Despite the numerous reports on the relationship between the pathology of the upper respiratory tract and bronchial asthma, the coverage of the nuances of the combination of COPD and rhinosinusitis began in the medical literature relatively recently. In a very few foreign publications, it was found that from 40 to 88% of patients with COPD present some kind of complaints from the side of the nose [3,5].

Thus, the prevalence of inflammatory pathology of the mucous membrane of the nasal cavity and paranasal sinuses in patients with COPD has practically not been studied, there is no information in the literature on X-ray screening examination of the paranasal sinuses in patients with exacerbation of COPD. This is surprising, given that the pathogenesis of chronic rhinosinusitis and COPD is based on the phenomenon of the so-called "vicious" circle - a chain of sequential, closely related structural changes in the mucous membrane of the respiratory tract, leading to the development of inflammation, disruption of mucociliary transport and colonization of the respiratory tract by microflora. It is known that one of the factors contributing to the development of COPD and, to a greater extent, its exacerbation is a bacterial infection [3]. This circumstance dictates the need to obtain convincing evidence of the relationship between the nature of chronic bacterial upper respiratory tract infection and the severity, nature, and clinical features of COPD. It is the representatives of conditionally pathogenic microflora that are the most significant causative agents of exacerbation of chronic rhinosinusitis and COPD [2,6]. However, there have been no published works on the parallel study of the microflora of the mucous membrane of the nasal cavity and lower respiratory tract in patients with COPD.



Purpose of the study. To study the prevalence of pathology of the nasal cavity and paranasal sinuses in patients with COPD and determine the role of an integrated approach in the treatment of inflammatory pathology of the nasal cavity, paranasal sinuses and COPD.

Materials and research methods. To solve the set tasks, 40 patients were examined. All patients were divided into 2 groups of 20 people. The first group consisted of 12 men and 8 women aged 39 to 66 years (mean age 52 years). All patients in this group suffered from exacerbation of chronic rhinosinusitis in combination with COPD stage 1-2 during exacerbation.

Research results. Symptoms of inflammatory diseases of the nasal cavity and paranasal sinuses are present in 64.9% of patients with COPD. According to an objective examination, chronic inflammatory changes in the paranasal sinuses are diagnosed in 32.9% of cases with exacerbation of COPD.

The microbial landscape of sputum and nasal secretions in COPD patients is almost identical. The main causative agent of exacerbation of chronic rhinosinusitis in patients with COPD (group 1) is *Streptococcus pneumoniae* (29%). *Streptococcus pneumoniae* in 11.1% (n=94) cases is determined in the nasal secretion in patients with COPD during remission or in the latent course of rhinosinusitis (2nd and 3rd groups), which indicates the colonization of the upper respiratory tract by opportunistic flora.

Atypical microflora (*Chlamydia pneumoniae*) was diagnosed in scrapings from the nasal cavity in 5.3% of cases and is not dominant.

The severity of an exacerbation of chronic rhinosinusitis is determined by the stage of COPD. This relationship was expressed in the prevalence of patients with III (29%) and IV (38%) stages of COPD diseases in the first group in patients with moderate rhinosinusitis compared with the second (III - 26%; IV - 23.3%) and third group (III - 21.20%; IV - 15.5%, respectively)

Antibiotic therapy for exacerbation of chronic rhinosinusitis and COPD should be carried out taking into account the probable causative agents of diseases of the upper and lower respiratory tract (cefixime, moxifloxacin), in combination with intranasal glucocorticosteroids (mometasonafuroate) and rinsing the nasal cavity with sea water.

Conclusion. As a result of a comprehensive examination of patients with COPD, it was determined that inflammatory pathology of the nasal cavity and paranasal sinuses is diagnosed in 64.9% of cases in patients with exacerbation of COPD, i.e., the need to consult an otorhinolaryngologist in the complex of mandatory diagnostic and therapeutic measures in patients is indicated. with COPD.

An almost identical microbial landscape was revealed in nasal swabs and in sputum in patients with COPD, which may indicate the relationship between inflammation of the upper and lower respiratory tract.

The most relevant causative agents of chronic rhinosinusitis in patients with COPD and their sensitivity to modern antibacterial agents have been identified.

An algorithm has been created to help the practitioner navigate in the choice of methods for diagnosing and treating inflammatory diseases of the nasal cavity in patients with COPD.

REFERENCES

1. Lopatin A.C. Pharmacotherapy of inflammatory diseases of the paranasal sinuses // *Consiliummedicum*. 2002. No. 4. - S. 186-188.
2. Ovchinnikov A.Yu., Kupreenko I.G. Complex use of drugs Feksadin and Nasobek in the treatment of allergic rhinosinusitis. // Abstracts of the 11th Russian National Congress "Man and Medicine". - M., 2004. -- 215 p.
3. Svistushkin V.M., Nikiforova G.N., Ovchinnikov A.Yu., Panyakina M.A. Possibilities of non-puncture treatment of purulent sinusitis // *Russian otorhinolaryngology*. -2004. No. 3. S. 150-152.
4. Yanov Yu.K., Strachunsky J.I.C. Antibiotic therapy of sinusitis in adult patients // *Consiliummedicum*. 2002, T. 4, No. 9. - S. 448-454.
5. Adams S., Melo J., Luther M. Antibiotics are associated with lower relapse rates in outpatients with acute exacerbations of chronic obstructive pulmonary disease // *Chest*. 2000. Vol. 117. - P. 1345-1352.
1. 6.Murphy T.F., Parameswaran G.I. *Moraxella catarrhalis*, a human respiratory tract pathogen // *Clin Infect Dis*. 2009 - Vol. 49 (1). - P.124-131.



**Impact Factor:
7.569**



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY

 9940 572 462  6381 907 438  ijirset@gmail.com



www.ijirset.com

Scan to save the contact details