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TITLE: MODERN APPROACHES TO DIAGNOSIS AND TREATMENT OF VASOMOTOR RHINITIS

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Abstract: This article analyzes modern approaches to the diagnosis and treatment of vasomotor rhinitis. The study is based on clinical cases and examines the effectiveness of various diagnostic methods and treatment regimens. The article justifies the advantages of modern therapy based on the results of clinical observation conducted on two groups of patients.

Keywords: Vasomotor rhinitis, diagnosis, intranasal corticosteroids, neurovegetative dysfunction, symptomatic treatment.

Introduction

Vasomotor rhinitis (VMR) is a non-allergic, chronic inflammation of the nasal mucosa manifested by symptoms such as nasal congestion, sneezing, and rhinorrhea. VMR mainly results from an imbalance in the autonomic nervous system. Although the exact causes are not fully understood, cold air, stress, hormonal changes, and certain medications are noted as triggering factors.

According to the World Health Organization, VMR occurs in 10–20% of the population and often severely reduces the quality of life. VMR diagnosis is frequently confused with allergic rhinitis, leading to incorrect treatment. Therefore, the application of modern and accurate diagnostic methods and selection of individual therapy are key objectives.

Materials and Methods

The study was conducted in the Department of Otorhinolaryngology at Bukhara State Medical Institute during 2024–2025. A total of 80 patients aged 18 to 55 years were selected. Patients were divided into two groups:

- Group 1 (n=40): Treated with conventional therapy – antihistamines (loratadine), nasal drops (naphazoline);
- Group 2 (n=40): Treated with modern therapy – intranasal corticosteroids (mometasone furoate), nasal irrigation (isotonic saline), and ipratropium bromide.

Diagnosis was performed in the following stages:

- Clinical questionnaire and assessment of symptoms using the VAS (Visual Analog Scale);
- Anterior rhinoscopy to assess the condition of the nasal mucosa;
- Rhinomanometry to evaluate nasal airway patency;
- Allergy tests (negative results characteristic of VMR).

The study lasted 8 weeks, with symptoms reassessed at weeks 2, 4, and 8.

Results

The study results were analyzed using the following main criteria:

1. **Reduction in overall symptoms according to VAS:**

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- In Group 1, symptoms decreased by 30–35% by the end of week 8;
- In Group 2, this figure was 70–80% ($p < 0.01$).

2. **Regression of nasal congestion and rhinorrhea:**

- In Group 1, symptoms only improved during treatment but worsened again by week 8;
- In Group 2, symptoms steadily decreased up to week 8.

3. **Rhinomanometry results:**

- Nasal airway patency improved by 45% in Group 2;
- In Group 1, this figure remained around 20%.

4. **Side effects:**

- In Group 1, 4 patients had nasal mucosal dryness, and 2 had headaches;
- In Group 2, only 1 patient reported mild nasal itching.

Discussion

The results show that conventional symptomatic approaches provide only temporary relief and do not affect the pathogenesis of the disease. Modern therapy not only eliminates symptoms but also helps achieve stability of the autonomic nervous system.

Mometasone furoate is a powerful anti-inflammatory intranasal corticosteroid and can be considered a first-line drug in the treatment of VMR. Nasal irrigation with isotonic saline enhances drug delivery to the mucosa and helps remove allergens. Additionally, anticholinergic agents like ipratropium bromide significantly reduce nasal secretions and alleviate the patient's condition.

The results are consistent with international studies. Notably, a study by American researcher Baraniuk (2019) also confirmed the superiority of intranasal corticosteroids in VMR therapy.

Conclusion

Vasomotor rhinitis is a chronic condition that significantly reduces the quality of life. Accurate diagnosis and comprehensive therapy are crucial for effective treatment. The study results show that modern treatment with intranasal corticosteroids is significantly more effective than conventional symptomatic therapy.

Practical recommendations:

1. Allergy tests should be mandatory to differentiate VMR from allergic rhinitis;
2. Intranasal corticosteroids should be recommended as first-line agents in complex therapy;
3. Nasal irrigation and medications that stabilize the autonomic nervous system should be widely used to control symptoms.

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