



ANALYSIS OF SOCIAL AND MEDICAL ASPECTS OF VASOMOTOR RHINITIS

¹Nurova G.U, ²Kharabayev H. E.
Bukhara State Medical Institute^{1,2}

ABSTRACT

This survey of ENT doctors shows that there is still no consensus on the diagnosis and treatment of vasomotor rhinitis among specialists. This confirms our opinion on the proposal to search for new methods of early diagnosis and new approaches to the treatment of vasomotor rhinitis in adult patients. The development of new diagnostic algorithms and treatment standards is necessary to improve early diagnosis, treatment of patients, and improve the quality of life of patients with vasomotor rhinitis.

Keyword: *Vasomotor rhinitis, idiopathic rhinitis, hyperreactivity, dynamics, hyperergic reaction, ENT doctor*

OBJECTIVE

To Analyze the social and medical significance of vasomotor rhinitis, study the processes of the disease and create a sufficient database..

MATERIALS AND METHODS

Total of 916 adults over 18 years of age were involved in the research.

RESULTS

All 3 analyzed symptoms (nasal congestion, nasal discharge, and frequent sneezing) were mostly rare. A characteristic feature is that all 3 symptoms occurred in three-quarters of patients, and one in four respondents indicated that these symptoms disturbed them very rarely. Indicators of physical discomfort and functional disorders in patients with vasomotor rhinitis were expressed to varying degrees, and a third of the examined patients were more or less (often, constantly) concerned about nasal congestion (73.9%), nasal discharge (81.5%) and frequent sneezing (76.7%). Respondents often associated the development of vasomotor rhinitis with allergies (55.3%), various stresses (21.2%), colds (13.7%) and environmental factors (9.8%).

INTRODUCTION

Environmental degradation, environmental pollution, uncontrolled use of medications, reduced body defenses- all this has caused an increase in the prevalence of vasomotor rhinitis [3] Vasomotor rhinitis is a common disease and in recent years the number of patients with this pathology is constantly increasing [1]

This disease is characterized by a pathological condition of the nasal mucosa of a non-inflammatory nature, which is based on a violation of nerve mechanisms that causes a normal physiological state, as a result of which exogenous and endogenous stimuli cause a hyperergic reaction. Vasomotor rhinitis is characterized by the following symptoms: paroxysmal sneezing, rhinorrhea, difficulty in nasal breathing [4]. In vasomotor rhinitis, nasal syndrome caused by dilation of nasal vessels and / or nasal hyperreactivity develops under the influence of non-specific exogenous or endogenous factors, but not as a result of an immunological reaction and is not associated with infection or eosinophilia [5].

Treatment of vasomotor rhinitis is an urgent problem, since conservative therapy is often not effective, which necessitates surgical intervention. The task of all methods of surgical treatment of vasomotor rhinitis is to correct the shape and volume of the lower nasal shells.

Undoubtedly, there are reasons for the development of Vasomotor rhinitis throughout childhood: [6,11]

- teething (growing BP is associated in this case with excessive inflow of pterygopalatine node);
- * hyperplasia of the adenoids, leading to retronasal obstruction and through a number of pathophysiological mechanisms to the reaction of the lower nasal conchs;
- * acute respiratory viral infections accompanied by frequent use of decongestants;
- * curvature of the nasal septum;
- * autonomic dysfunction syndrome;
- puberty;
- * the beginning of sexual life – the so-called "rhinitis of the honeymoon", etc.

The study and analysis of medical and social aspects of the course of a certain nosological unit allows specialists to determine the level of influence of this disease on the physical and psychological state of a person and the family in which he lives[1,12]

The term "vasomotor rhinitis" has been criticized in recent years because the violation of vasomotor innervation, which is the basis of the pathogenesis of vasomotor rhinitis, occurs in all forms of rhinitis except atrophic. Currently, there is no generally accepted definition and classification of the disease. Moreover, the very existence of this form of rhinitis is questioned in recent versions of international recommendation documents [8]. Foreign researchers classify vasomotor rhinitis as a form of non-allergic rhinitis (idiopathic rhinitis), in their opinion, vasomotor symptoms are inherent in all forms of rhinitis. In many countries (Russia, Ukraine, and others), vasomotor rhinitis retains the status of an independent nosological disease [9].

Studies conducted in different populations of several countries have shown that over the past 10 years, the incidence of this disease has increased by an average of 11%, and now its occurrence among the population of certain regions has increased to 16%, even to 50%. In the United States alone, there are 19 million patients with vasomotor rhinitis, and another 26 million suffer from mixed forms, in which allergies are not the only cause of the disease. The cost of treating this disease in the United States is 2-3 billion dollars annually [9,10].

OBJECTIVE

To Analyze the social and medical significance of vasomotor rhinitis, study the processes of the disease and create a sufficient database. The aim of the research was to improve the methodology for studying and analyzing the medical and social aspects of the course of vasomotor rhinitis in patients in a comparative aspect.

Material and methods for assessing the impact of vasomotor rhinitis on the quality of life of patients were studied and analyzed the medical and social aspects of the course and outcome of vasomotor rhinitis in adult patients in a comparative aspect. [11]

A total of 916 adults over the age of 18 were involved in the research. Among the examined patients were patients with vasomotor rhinitis, who responded that they were diagnosed with vasomotor rhinitis ($n=594$, $64.8\pm 1.6\%$) and had had this disease in the past ($n=322$, $35.2\pm 1.6\%$).

Among all the surveyed ($n=916$), there were 487 men ($53.2\pm 1.6\%$) and 429 women ($46.8\pm 1.6\%$). It can be seen that representativeness is observed in both cases, which allows us to get reliable results.

Analysis of the results shows that to a certain extent, some of the respondents we examined feel physical discomfort and functional disorders due to vasomotor rhinitis (table 3.1). It was found that 29 respondents ($4.9\pm 0.9\%$) are constantly concerned about nasal congestion, and $30.3\pm 1.9\%$ ($n=100$) of respondents often felt this symptom, only 155 respondents ($26.1\pm 1.8\%$) complained about nasal congestion very rarely, almost did not notice. This means that three-quarters of patients indicated that they were bothered by nasal congestion at least once a day.

Another symptom of vasomotor rhinitis is nasal discharge, which was very rarely reported by 110 people ($18.1\pm 1.6\%$). In other cases, nasal discharge rarely bothered 290 patients ($48.9\pm 2.1\%$), often 173 patients ($29.1\pm 1.9\%$) and constantly 21 patients ($3.5\pm 0.7\%$).

Almost the same survey results were observed in patients and in determining the incidence of frequent sneezing. The responses were as follows: very rarely disturbed in $23.3\pm 1.7\%$ ($n=138$) cases; rarely disturbed in $38.0\pm 2.0\%$ ($n=226$), often in $36.3\pm 2.0\%$ ($n=216$) and constantly in $2.4\pm 0.6\%$ ($n=14$) cases.

All 3 analyzed symptoms (nasal congestion, nasal discharge, and frequent sneezing) were mostly rare. A characteristic feature is that all 3 symptoms occurred in three-quarters of patients, and one in four respondents indicated that these symptoms disturbed them very rarely.

It was found that in more than half of cases ($55.3\pm 2.0\%$, $n=329$), the respondents associated symptoms of vasomotor rhinitis with allergies, and in $21.2\pm 1.7\%$ ($n=126$) cases, the presence of the disease was associated with various stresses. The above-mentioned symptoms were associated with colds in 81 respondents ($13.7\pm 1.4\%$), while only 58 people ($9.8\pm 1.2\%$) attributed their illness to various environmental factors (water, soil, climate and atmospheric).

The respondents' answers related to the presence of discomfort in the nasal cavity and the possibility of a quiet sleep during rest in the respondents. To the questionnaire question "how often Do you experience discomfort in the nasal cavity?" 71 respondents ($11.9\pm 1.3\%$) answered that "constantly", and 126 respondents ($21.2\pm 1.7\%$) answered "very rarely". But the majority of respondents answered this question "rarely" ($n=193$, $32.6\pm 1.9\%$) and "often" ($n=204$, $34.3\pm 1.9\%$). From the answers, it is clear that this condition is individual in patients and the respondents did not Express a common opinion.

Sleep disorders were associated with the presence of vasomotor rhinitis ("constantly") in 69 respondents ($11.6\pm 1.3\%$), but 178 patients (29.9 ± 1.9) indicated that sleep disorders associated with vasomotor rhinitis bothered them "frequently". The majority of respondents did not notice any connection between sleep disorders and vasomotor rhinitis and therefore answered "rarely" ($41.5\pm 2.0\%$, $n=246$) and "very rarely" ($17.0\pm 1.5\%$, $n=101$).

Thus, such indicators of physical discomfort and functional disorders as "discomfort in the nasal cavity" and "sleep disturbance" patients with vasomotor rhinitis in most cases were not associated with their disease. If in the case of "nasal discomfort" this was 53.8% of cases, in the case of "sleep disturbance" it was 58.5% of cases. In our opinion, these parameters are not the leading ones in patients with vasomotor rhinitis, so we believe that these facts should not be crucial in assessing the General clinical and psychological state of the patient.

Another factor that evaluates the condition of a patient with vasomotor rhinitis is the study of the patient's emotional state. This factor is also extremely important for assessing the psychological state of the patient, which is of great importance for the process of his recovery and assessment of the quality of life.

As can be seen from table 1.3, only $9.6 \pm 1.2\%$ ($n=57$) of respondents are constantly upset because of problems with vasomotor rhinitis, $36.5 \pm 2.0\%$ ($n=217$) of respondents were often upset, in addition, the problem of vasomotor rhinitis practically did not upset the majority of respondents-respectively, "rarely" $37.1 \pm 2.0\%$ ($n=220$) and "very rarely" in $16.8 \pm 1.5\%$ ($n=100$) cases.

From the results obtained, it follows that the majority of patients are not constantly upset by problems with the studied disease. When we determined the cause, it turned out that they were satisfied with the results of treatment ($80.1 \pm 1.6\%$, $n=476$), confident in their full recovery ($89.6 \pm 1.3\%$, $n=532$), had a more complete understanding of vasomotor rhinitis (92.4 ± 1.1 , $n=549$) and were grateful to otorhinolaryngologists ($93.1 \pm 1.4\%$). Data shows that all patients trust their doctors and have a high medical culture. This means that patients have a lot of confidence in otorhinolaryngologists, which should be supported in every possible way.

It should be emphasized that the respondents "frequently" and "constantly" lost their composure due to vasomotor rhinitis in them- $8.4 \pm 1.1\%$ ($n=50$) and $2.2 \pm 0.6\%$ ($n=13$), respectively, and were generally cheerful, despite the fact that they have vasomotor rhinitis-respectively "often" 197 cases ($33.2 \pm 1.9\%$) and "constantly" 234 cases ($39.4 \pm 2.0\%$).

In addition, the same questions were asked to patients who had had vasomotor rhinitis ($n=322$). The results show that the emotional state parameters of patients with vasomotor rhinitis were significantly higher than in patients ($P < 0.001$) for all four questions. Thus, the respondents who were ill indicated that they were very rarely upset because of this disease ($96.3 \pm 1.1\%$, $n=310$), as well as because of constant treatment of this disease ($98.4 \pm 0.7\%$, $n=317$). The majority of patients in this group did not lose their composure ($99.1 \pm 0.5\%$, $n=319$) and were cheerful ($99.1 \pm 0.5\%$, $n=319$) despite having had vasomotor rhinitis.

Thus, the study and evaluation of the parameters of the emotional state of patients and patients with vasomotor rhinitis shows that patients constantly (9.6%) and often (36.5%) were upset because of problems with vasomotor rhinitis in a smaller number than those who paid little attention to it (53.9%), in addition, it should be emphasized that this indicator was 96.3% in patients who were ill. The results were similar to the answer to the question "are You upset because of the constant treatment of vasomotor rhinitis?". However, many patients did not lose their composure (89.4%) and were cheerful (72.6%), despite the fact that they had vasomotor rhinitis. The same parameters were the maximum for those who were ill (99.1%). The reasons for this emotional state were satisfaction with the results of treatment (80.1%), confidence in full recovery (89.6%), high medical culture and gratitude to the doctors of this specialty (93.1%).

The results show that the social condition of the surveyed population is generally well-off. Patients "very rarely" ($37.9 \pm 2.0\%$, $n=225$) and "rarely" ($49.8 \pm 2.1\%$, $n=296$) feared for their lives due to vasomotor rhinitis. Among the "frequently" ($9.3 \pm 1.2\%$, $n=55$) and "constantly" ($3.0 \pm 0.7\%$, $n=18$) patients with vasomotor rhinitis who feared for their lives were mostly elderly patients (61 out of 73 respondents, 83.6%).

It should be emphasized that most of the respondents were satisfied with the diagnosis and treatment of vasomotor rhinitis by doctors ($72.1 \pm 2.0\%$, $n=428$) of their region, those respondents who were "rarely" ($20.3 \pm 1.7\%$, $n=121$) and "very rarely" ($7.6 \pm 1.1\%$, $n=45$) satisfied with the diagnosis and treatment of their disease mainly complained about the lack of modern, world-standard medical equipment (158 of 166 respondents, $95.2 \pm 1.7\%$), which did not depend on doctors of practical level in any way.

To the next question about the trust of the surveyed patients in otorhinolaryngologists, only 47 respondents ($7.9 \pm 1.1\%$) answered that they trust "very rarely" (almost do not trust). There were significantly more positive responses ($P < 0.001$). Thus, if $32.3 \pm 1.9\%$ ($n=191$) of respondents "frequently" trusted, then 216 respondents ($36.3 \pm 2.0\%$) showed constant trust. Analysis of the study results shows that mostly patients trusted their doctors in the treatment of vasomotor rhinitis.

The same questions were answered by patients who were ill ($n=322$) with vasomotor rhinitis. The overwhelming number of respondents indicated that they did not fear for their lives during the illness and after recovery ($99.4 \pm 0.4\%$, $n=320$), were satisfied with the diagnosis and treatment of this disease ($98.8 \pm 0.6\%$, $n=318$), and almost completely trusted the doctors of their region (99.4 ± 0.45 , $n=320$).

Thus, the study and analysis of the parameters of the social status of patients with vasomotor rhinitis showed that patients generally have a positive social status, expressed in the vast majority of cases by the absence of fear for their lives due to this disease (87.7%), satisfaction with the diagnosis and treatment of this disease (72.1%), trust in doctors-otorhinolaryngologists in their region (92.1%). Established facts indicate a positive social state of patients, which allows us to assess the relationship between patients and doctors-otorhinolaryngologists trust in the treatment of vasomotor rhinitis. The reason for the observed sharp differences in responses between patients and those who have been ill is the psychological state after the disease, when the patient fully returns to active life and there is a high quality of life.

The majority of respondents indicated that clinical symptoms of vasomotor rhinitis did not appear since childhood ($55.0 \pm 2.0\%$, $n=327$). Almost the same opinion was held by adult respondents who had this disease ($59.6 \pm 2.7\%$, $n=192$).

Results of the study of indicators of family well-being of patients with vasomotor rhinitis

It should be emphasized that the majority of respondents "rarely" and "very rarely" used nasal medications without a doctor's recommendation-in $48.8 \pm 2.1\%$ ($n=290$) and $26.8 \pm 1.8\%$ ($n=159$) cases, respectively.

Another aspect of assessing family well-being is the presence of the effect of medications used independently by the respondents. Only 22 respondents ($3.7 \pm 0.8\%$) answered that there is an effect from self-medication, 108 respondents ($18.2 \pm 1.6\%$) also answered in the affirmative - "the effect is often manifested". The majority of respondents admitted the fact that self-administered nasal medication had a positive effect "rarely" and "very rarely" - respectively $53.4 \pm 2.0\%$ ($n=317$) and $24.7 \pm 1.8\%$ ($n=147$). This fact confirms that self-treatment

generally does not bring a positive effect in three-quarters of the respondents, patients and/or patients with vasomotor rhinitis.

If we analyze those people who were constantly self-medicating (n=38, 6.4%), it turned out that they were mostly medical workers or their family members (32 of the 38 respondents who answered in the affirmative).

Conclusions. This survey of ENT doctors shows that there is still no consensus on the diagnosis and treatment of vasomotor rhinitis among specialists. This confirms our opinion on the proposal to search for new methods of early diagnosis and new approaches to the treatment of vasomotor rhinitis in adult patients. The development of new diagnostic algorithms and treatment standards is necessary to improve early diagnosis, treatment of patients, and improve the quality of life of patients with vasomotor rhinitis.

If we draw a conclusion about the social and medical aspects of vasomotor rhinitis based on the above indications, the importance of these cases is justified.

- indicators of physical discomfort and functional disorders in patients with vasomotor rhinitis were expressed to varying degrees, and a third of the examined patients were more or less (often, constantly) concerned about nasal congestion (73.9%), nasal discharge (81.5%) and frequent sneezing (76.7%);

- respondents often associated the development of vasomotor rhinitis with allergies (55.3%) and various stresses (21.2%). There were also a lot of those who associated the disease with a cold (13.7%) and environmental factors (9.8%);

- discomfort in the nasal cavity and sleep disorders patients with vasomotor rhinitis in most cases were not associated with their disease. If in the case of "nasal discomfort" this was 53.8% of cases, in the case of "sleep disturbance" it was 58.5% of cases.;

- the study and evaluation of the parameters of the emotional state of patients and patients with vasomotor rhinitis shows that patients constantly (9.6%) and often (36.5%) were upset because of problems with vasomotor rhinitis in a smaller number than those who paid little attention to it (53.9%), in addition, it should be emphasized that this indicator was 96.3% in patients who were ill. The results were similar with the answer to the question "are You upset because of the constant treatment of vasomotor rhinitis?»;

- patients did not lose their composure (89.4%), were cheerful (72.6%), despite the fact that they had vasomotor rhinitis. The same parameters were the maximum for those who were ill (99.1%). The reasons for this emotional state were satisfaction with the results of treatment (80.1%), confidence in full recovery (89.6%), high medical culture and gratitude to doctors of this specialty (93.1%);

- the results of a survey of otorhinolaryngologists show that the majority of respondents (77.2%) consider allergic rhinitis to be a variant of vasomotor rhinitis;

- almost all respondents (98.8%) consider patient complaints and anamneses morbi to be the main criteria for diagnosing vasomotor rhinitis. Rhinoscopic picture (in 88.0% of cases) and endoscopic signs (in 61.7% of cases) are also suggested as the main diagnostic criteria. Radiography as a diagnostic criterion is recognized, just over half of the examined (54.5% of cases);

- it was found that most otorhinolaryngologists suggest starting treatment of vasomotor rhinitis with intranasal corticosteroids (76.6%) and physiotherapy procedures (73.7%). Most tend to think that treatment will be effective if treatment is started with antihistamines (58.1%), but more than 1/3 of specialists also offer decongestants and prolonged steroids locally (39.5% each). There were many respondents who, without ignoring conservative treatment, immediately offered surgical treatment of this disease (58.7%);

The development of new diagnostic algorithms and treatment standards is necessary to improve early diagnosis, treatment of patients, and improve the quality of life of patients with vasomotor rhinitis.

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