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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии
საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman (Кириллица)**, для текста на грузинском языке следует использовать **AcadNusx**. Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - <http://www.spinesurgery.ru/files/publish.pdf> и http://www.nlm.nih.gov/bsd/uniform_requirements.html В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректур авторам не высылаются, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or computer-printed on a single side of standard typing paper, with the left margin of 3 centimeters width, and 1.5 spacing between the lines, typeface - **Times New Roman (Cyrillic)**, print size - 12 (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf

In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

**Articles that Fail to Meet the Aforementioned
Requirements are not Assigned to be Reviewed.**

ავტორთა საქურაღებოლ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დაიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx**. შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შედეგის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფხიხლებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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EFFECT OF INTRANASAL ELECTROPHORESIS WITH 5% POTASSIUM IODATE SOLUTION ON CLINICAL OUTCOME OF PATIENTS WITH HYPERTROPHIC RHINITIS

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Abstract.

High prevalence of hypertrophic rhinitis makes more topical the problem of search of new, more effective means of treatment this pathology. 37 patients with hypertrophic rhinitis were examined.

The clinical examination included the study of complaints and objective visual indicators associated with hypertrophic rhinitis. The olfactory function of the nose and the motor activity of the ciliated epithelium of the nasal mucosa were also studied.

It has been established, that treatment intranasal electrophoresis with 5% potassium iodate solution caused attenuation, up to disappearance of the complaint, has a normalizing action on smelling function of nose, motor activity of scintillans epithelial of nasal mucosa and other objective indexes of clinical status. The above shown positive shifts were more positive in mild cases of hypertrophy.

Key words. Potassium iodate, electrophoresis, smelling function, hypertrophic rhinitis, pathology.

Introduction.

Rhinitis belongs to one of the most common categories of pathologies, which occurs equally in both women and men [1,2]. The most characteristic symptoms of rhinitis of various origins, be it hypertrophic or vasomotor, are nasal breathing disorders, rhinorrhea, sneezing, decreased sense of smell [3-6]. Difficulty in breathing with a pronounced nose has a negative effect on the cardiovascular and respiratory systems, and the human capacity for work is also sharply reduced [7-9].

Recently, cases of chronic hypertrophic inflammation of the mucous membrane of the nasal cavity have increased in adults. Their share in the structure of otorhinolaryngological diseases is from 4 to 20%. Treatment of this pathology is mainly carried out by surgical methods because conservative therapy does not bring the desired result [10].

The etiological factors of the formation of hypertrophic rhinitis are diverse [11]. The main reasons are a violation of the architectonics of the nasal cavity (deviation of the nasal septum, septal ridge), infectious and non-infectious inflammatory diseases of the nose and paranasal sinuses [11-13].

In recent decades, intracellular bacterial microorganisms, including *Mycoplasma pneumoniae* (*M. pneumoniae*), have been considered an infectious cause of hypertrophic rhinitis. *Mycoplasma* is a gram-negative bacterium that lacks a cell wall and is a true energetic and metabolic parasite. Infection occurs in the body through the respiratory tract. In some cases, contact and household transmission may occur (contaminated hands, household items) [14,15].

Purpose and tasks.

Study of the effect of intranasal electrophoresis of 5% potassium iodate on the clinical condition of patients with hypertrophic rhinitis [16].

Materials and Methods.

Observation was carried out on 37 patients with hypertrophic rhinitis aged 18 to 59 years. 16 of the examined were women, 21 were men.

The study of the clinical condition included the study of complaints and objective visual indicators related to hypertrophic rhinitis.

The olfactory function of the nose and the motor activity of the ciliated epithelium of the nasal mucosa were also studied - the condition of the mucous membrane.

When studying the olfactory function of the nose, we used liquids with increasing odors - 0.5% acetic acid solution, 76° ethyl alcohol and valerian tincture. If the patient could not perceive the usual smell of the environment but could perceive the smell of all the liquids listed above, it was considered that he had a first-degree disorder (impairment) of the nasal olfactory function - first-degree hyposmia. If the examined person could not perceive the smell of 0.5% solution of acetic acid but perceived only the smell of 76° ethyl alcohol and valerian tincture, it was considered that the patient had a second-degree decrease in the function of smell - second-degree hyposmia. If the patient perceived only the smell of valerian tincture when using these solutions, it was considered that he had hyposmia of the III degree. The inability to perceive the smell of all used solutions indicates the absence of the nose's olfactory function - anosmia. The patient's perception of normal environmental odors indicates normal olfactory function of the nose.

A study of mucociliary clearance was performed by the Markov [17] method. We used charcoal powder mixed with starch-agar gel as an indicator (starch - 0.2 g, agar-agar - 1 g, water - 10 ml). We applied the gel to the front surface of the lower nasopharynx and controlled its passage into the nasopharynx. It was considered normal if coal particles passed through the nose within 15 minutes. The passage of these particles into the nasal cavity in 16-30 minutes indicated the violation of the first degree of mucociliary clearance, and in 31-45 minutes - the violation of the second degree of mucociliary clearance. If the passage time of particles in the nasopharynx was more than 45 minutes, it was considered that the patient had a violation of degree III mucociliary clearance.

A 5% aqueous solution of potassium iodate was used in the treatment of patients with hypertrophic rhinitis.

The course of treatment included 18-20 intranasal potassium iodate electrophoresis procedures, which were performed daily, except for Sundays. The duration of the procedure was 18-20 minutes [16,18,19].

Cylindrical lead electrodes - 2 mm diameter and 3-4 cm long bilateral anode were used during the procedures. These electrodes were wrapped with cotton wool soaked in a 5% aqueous solution of potassium iodate, which we placed in the nasal passages 1-2 cm deep, with the amount of cotton wrapped around the cylinders to fit snugly against the inner surface of the

nasal passages. On the upper lip, under the nose, we attached a piece of buckram to the skin with a size of 2 cm x 5 cm. The ends of the two-sided anode electrodes coming out of the nose, wrapped in cotton, were fixed on the said buckram.

A cathode electrode, measuring 5 cm x 16 cm, was fixed to the lower neck with a hydrophilic pad moistened with warm tap water [16,17,20,21].

Results and its discussion.

Studies have shown that treatment with potassium iodate by intranasal electrophoresis led to a decrease in complaints and

Table 1. Effects of potassium iodate intranasal electrophoresis treatment on the subjective smell of patients with hypertrophic rhinitis.

complaints			(n=37)	
			number of patients	
			Abs,	%%
1			2	3
nasal discharge	before treatment		15	40,50
	after treatment	disappeared	8	21,62
		decreased	5	13,51
		has not changed	2	5,40
Constant nasal congestion and difficulty breathing through the nose	before treatment		37	100,00
	after treatment	disappeared	10	27,03
		decreased	22	59,46
		has not changed	5	13,51
itchy nose	before treatment		5	13,51
	after treatment	disappeared	3	8,11
		decreased	1	2,70
		has not changed	1	2,70
Reduced olfactory function of the nose (hyposmia)	before treatment		19	51,35
	after treatment	disappeared	4	10,81
		decreased	13	35,14
		has not changed	2	5,41
Nasal sneezing attacks	before treatment		5	13,51
	after treatment	disappeared	3	8,11
		decreased	1	2,70
		has not changed	1	2,70
Frequent bleeding from the nose	before treatment		13	35,14
	after treatment	disappeared	5	13,51
		decreased	8	21,62
		has not changed	-	-
Airlessness	before treatment		25	67,57
	after treatment	disappeared	8	21,62
		decreased	15	40,54
		has not changed	2	5,41
Cough	before treatment		12	32,43
	after treatment	disappeared	8	21,62
		decreased	2	5,41
		has not changed	2	5,41
Ringing in the ears	before treatment		14	40,0
	after treatment	disappeared	5	13,51
		decreased	7	18,92
		has not changed	2	5,41
Decreased work capacity and fatigue easily	before treatment		30	85,71
	after treatment	disappeared	12	32,43
		decreased	16	43,24
		has not changed	2	5,41
A dull pain in the forehead	before treatment		5	13,51
	after treatment	disappeared	1	2,70
		decreased	2	5,41
		has not changed	2	5,41

Table 2. Effect of potassium iodate intranasal electrophoresis treatment on some objective indicators of clinical condition in patients with hypertrophic rhinitis.

Indicators			(n=37)	
			number of patients	
1			Abs,	%%
2			3	
Hypertrophy of the nasal inferior turbinate (rhinoscopy data)	before treatment		37	100,0
	after treatment	disappeared	2	5,41
		decreased	20	54,05
		has not changed	15	40,54
discharge from the nose	before treatment		12	32,43
	after treatment	disappeared	8	21,62
		decreased	4	10,81
		has not changed	-	-
Rhinomanometric data	before treatment		37	100,0
	after treatment	disappeared	4	10,81
		decreased	29	78,38
		has not changed	4	10,81
The need to breathe through the mouth	before treatment		25	67,57
	after treatment	disappeared	8	21,62
		decreased	15	40,54
		has not changed	2	5,40
Hypertrophic follicles in the oropharyngeal area and nasal secretion overflow from the nasopharynx to the posterior pharyngeal wall	before treatment		10	27,03
	after treatment	disappeared	2	5,40
		decreased	8	21,62
		has not changed	-	-

Table 3. Effect of potassium iodate intranasal electrophoresis treatment on nasal olfactory function in patients with hypertrophic rhinitis.

The condition of the nasal olfactory function			(n=37)	
			number of patients	
1			Abs.	%%
2			3	
Normal olfactory function of the nose	before treatment		27	72,97
	after treatment		30	81,08
Deterioration of nasal olfactory function I degree	before treatment		5	13,51
	after treatment		3	8,11
Deterioration of nasal olfactory function II degree	before treatment		3	8,11
	after treatment		2	5,41
Deterioration of nasal olfactory function III degree	before treatment		2	5,41
	after treatment		1	2,70
Absence of nasal olfactory function (anosmia)	before treatment		-	-
	after treatment		-	-

objective and visual indicators of the clinical condition in patients with hypertrophic rhinitis, until complete disappearance. These positive changes were more pronounced in relatively mild forms of the disease (Tables 1 and 2).

Patients with hypertrophic rhinitis had various disorders of nasal olfactory function before treatment. This violation was detected in 10 (27.03%) patients.

Patients with grade 1 impairment of nasal olfactory function were more frequent, while absence of smell - anosmia was not observed in any of the examined patients.

Treatment with 5% potassium iodate intranasal electrophoresis resulted in a reduction in the number of patients with nasal olfactory dysfunction and an attenuation of the severity of these disorders (Table 3).

In the vast majority of patients with hypertrophic rhinitis who took part in the mentioned study, we also found slowing

down of the motor activity of the ciliated epithelium of the nasal mucosa, which was manifested by varying degrees of mucociliary clearance disorders. This pathological process was more pronounced during the severe course of the disease.

Treatment with potassium iodate by intranasal electrophoresis resulted in increased motor activity of the ciliated epithelium of the nasal mucosa. This positive process was more pronounced during the mild form of the pathology and was manifested by a decrease in the number of patients with nasal mucociliary clearance disorders and a weakening of the severity of the disorders.

In particular, before treatment, normal mucociliary clearance was detected in 21 (26.76%) patients. In 10 (27.02%) patients with hypertrophic rhinitis, mucociliary clearance disorder of the first degree was detected, in 6 (16.22%) - mucociliary clearance disorder of the second degree. No third-degree mucociliary clearance disorders were observed in the studied patients.

As a result of treatment with potassium iodate by intranasal electrophoresis, normal mucociliary clearance of the mucous membrane was revealed in 21 (56.76%) patients with hypertrophic rhinitis; first-degree mucociliary clearance disorder in 10 (27.02%); Second-degree mucociliary clearance disorder - 6 (16.22%). No third-degree mucociliary clearance disorders were observed in the studied patients.

Based on the interpretation of similar changes in the clinical condition of patients with hypertrophic rhinitis in the literature [3,18,21], the mechanism of action of potassium iodate intranasal electrophoresis treatment for this pathology can be explained as follows.

This method of treatment in patients with hypertrophic rhinitis leads to weakening, even disappearance of inflammation in the nasal mucosa and reduction of swelling in the nasal mucosa, these changes are accompanied by a decrease in complaints; It normalizes the nasal olfactory function and the activity of the ciliated epithelium of the nasal mucosa and improves other objective indicators of the clinical condition in patients with hypertrophic rhinitis.

Thus, to summarize the above, it can be assumed that treatment with potassium iodate intranasal electrophoresis has a normalizing effect on the clinical condition of patients with hypertrophic rhinitis, which is more pronounced in mild cases.

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