



Journal **Website:**
<http://usajournalshub.com/index.php/TAJMSPR>

Copyright: Original content from this work may be used under the terms of the creative commons attributes 4.0 licence.

On The Treatment Of Patients With Chronic Atrophic Rhinitis

Nasretdinova Makhzuna Takhsinovna

Samarkand State Medical Institute, Republic Of Uzbekistan, Samarkand, Uzbekistan

Shodiev Anvar Erkinovich

Samarkand State Medical Institute, Republic Of Uzbekistan, Samarkand, Uzbekistan.

Karabaev Hurram Esankulovich

Tashkent Pediatric Medical Institute, Republic Of Uzbekistan, Tashkent, Uzbekistan.

ABSTRACT

A new method of treatment for atrophic rhinitis with phonophoresis was used in 25 patients. The treatment was carried out with an ultrasound device UTP-1 with a modified emitter (head size - 1 cm²). The area of the back and the slopes of the external nose, previously lubricated with vaseline oil, was subjected to sonication, while the preparation Olyfrin was injected into the nose. Ultrasound with an intensity of 0,15-0,2 W/cm² was used in a continuous mode. The duration of exposure is 5 minutes. The procedures were carried out every other day. The course is 10-15 procedures. A directly positive effect was observed in all patients; in 8 patients all symptoms of the disease disappeared, in 12 patients the most painful symptoms (difficulty in nasal breathing, crusts formation), in 5 patients a weakening of symptoms was observed. In 15 patients, only ultrasound and the introduction of tampons with olive oil into the nasal cavity were used.

Disappearance of symptoms of the disease was noted in 5 patients, in 10 patients dryness in the nose did not disappear. The results of the treatment were followed up in terms of 3 to 6 months. Recurrence of the disease with a significant weakening of symptoms was observed in 5 patients who received ultrasound and in 3 patients treated with phonophoresis.

KEYWORDS

Atrophy, phonophoresis, ultrasound, rhinopneumometry.

INTRODUCTION

Modern methods of treatment of atrophic rhinitis are mostly ineffective, so the search for new effective ways to treat this disease remains an urgent problem and deserves much attention. Recently, ultrasound has been successfully used in medical practice for the purpose of therapy and diagnosis of various diseases [1,3]. Numerous studies and observations have proved that under the influence of ultrasound in the tissues and cells of the body there is a complex of biophysical and biochemical changes. In medical practice, antiseptic, moisturizing and anti-inflammatory effects of ultrasound have been established. According to many authors, significant effectiveness of ultrasound therapy in diseases of the musculoskeletal system, neuralgia, neuritis, trophic ulcers, and some inflammatory diseases has been shown. In otorhinolaryngology, ultrasound is used in the treatment of various forms of hearing loss, Meniere's disease, chronic tonsillitis, scleroma, and chronic rhinitis [2,4]. Given the good results of ultrasound therapy in the treatment of a number of diseases, including those based on atrophic and neuro-reflex disorders, ultrasound was used to treat patients suffering from atrophic rhinitis. In recent years a number of experimental studies proved the possibility of introduction of medicinal substances by means of ultrasound. According to many authors, ultrasound accelerates diffusion processes, normalizes the permeability of cell membranes, increases tissue metabolism, and changes the water environment [1,3,5]. The nasal mucosa is a powerful protective barrier, provides air conditioning for the inhaled air, and also detains and neutralizes substances that can enter the body with air.

Introduction of a medicinal substance by ultrasound has a number of advantages over phonophoresis. When comparing the results of treatment of patients with peripheral nervous system disease with ultrasound of medicinal substances, the effectiveness of this method was noted. We have not found information about the use of phonophoresis in otorhinolaryngological practice in the available literature. It is known that among the currently existing methods of treatment of atrophic rhinitis, the introduction of medicinal substances is widely used [2,4]. Clinical observations and experimental studies have confirmed the positive therapeutic effect of topical application of olive oil. However, along with the undoubted positive aspects of this method of treatment, there are some side effects that are manifested by headache, an allergic reaction to olive oil, dizziness, and General weakness [1,3,4]. The occurrence of such complications seems to be explained not by the action of the drug itself, but by the high emotional vegetative-vascular lability of patients with atrophic rhinitis reacting to the nasal mucosa, which is a reflexogenic zone with extensive and diverse organ connections. The above has prompted us to replace olive oil with the drug Olifrin, while we assumed that the simultaneous use of two therapeutic factors - ultrasound and the drug will allow you to get a better therapeutic effect. We examined 40 patients (31 women and 9 men) with a chronic form of atrophic rhinitis. The age of patients is from 23 to 59 years. The diagnosis of atrophic rhinitis was made on the basis of a characteristic clinical picture, differentiation of its forms was made after a targeted anamnesis, General clinical examination and a number of special laboratory tests of blood, bacteriological research, separated from the nose.

MATERIAL AND METHODS

The first control group included 15 patients who used phonophoresis with olive oil, and 25 patients of the main group used only ultrasound with Olifrin. In cases where the nasal mucosa is dry, it may cause itching and burning, the formation of crusts, as well as the appearance of nosebleeds and headaches. When the nasal mucosa is dry, a person experiences discomfort, difficulty breathing through the nose. A person can't sleep at night. It is important that when the nasal mucosa is dry, the main function of the nose ceases to be performed: filtering the air that enters the lungs when breathing. Does not contain harmful substances Olefin safe during pregnancy and breastfeeding. It moisturizes the mucosa, creates a protective film on its surface, thereby helping it perform its function. In addition, a well-hydrated mucosa is easier to resist bacterial infection. It is available in the form of a spray of 15 ml, used 1-3 times a day, there are no restrictions on the duration of use. The treatment was performed with a domestic ultrasound device UTP-I (oscillation frequency 830 kHz) with a modified emitter (the head size was reduced to 1 cm). The area of the back and stingrays of the external nose were voiced. The contact medium is vaseline oil. The ultrasonic head was slowly moved along the surface to be voiced, making circular and linear movements. Ultrasound intensity of 0.15-0.4 W / cm² was used in continuous mode. Duration of action 5 min. The skin of the back and side slopes of the nose was smeared with vaseline oil, and the drug Olifrin was injected into the nasal passages. Treatment was performed every other day. The course of 10-15 procedures. When using ultrasound with Olifrin, a positive therapeutic effect was observed in all 25 patients. The disappearance of all symptoms

of atrophic rhinitis was observed in 8 patients, 12 had a significant improvement (the most painful symptoms of the disease disappeared, other symptoms became less pronounced), in 5 patients, the results of treatment were regarded as satisfactory (there was a pronounced weakening of the symptoms of rhinitis). All patients underwent the procedure well. Improvement in the treatment process in 6 patients occurred on day 1-2, in 15 cases-on day 3 and in 4 - on day 7 of the 10th day of treatment. Patients of the control group (15 people) were treated by inserting gauze tampons soaked in olive oil into their nasal passages without ultrasound. In no case was there a positive therapeutic effect at the end of the course. After treatment with phonophoresis, 9 patients showed a significant decrease in the symptoms of the disease, 4-their complete disappearance, and 2 patients had ineffective treatment. To judge the effectiveness of our ultrasound therapy and olive oil phonophoresis method, the following tests were used: study of the dynamics of clinical manifestations of the disease, rhinopneumometry, cytological study of prints from the surface of the nasal mucosa, study of the function of the ciliated epithelium of the nasal mucosa, olfactometry, bacteriological study of nasal discharge. These tests were applied in 33 people (15 patients of the 1st group treated with phonophoresis, and 25 patients of the 2nd group treated with ultrasound). The study was conducted before treatment (in the inter-access period) and after treatment. In order to determine the protective function of the nasal mucosa, we studied the motor activity of the scintillating epithelium. Charcoal was used as an indicator powder. According to IO. S. Vasilenko, the average time of movement of indicator powder from the anterior parts of

the nose to the nasopharynx in healthy people is from 5 to 35 minutes.

Table 1. Indicators of protective and respiratory function in patients with atrophic rhinitis.

Indicators	1 st group before treatment	1 st group after treatment	Group 2 before treatment	Group 2 after treatment
Respiratory	15	12	25	25
Motor	15	10	25	22

CONCLUSION

Among the examined patients with atrophic rhinitis, the inhibition of motor activity of the scintillating epithelium was found in the first group of 15 patients after treatment with phonophoresis, improvement occurred in 10. In the main group, 14 of them had the appearance of powder in the nasopharynx only after 60 minutes. After treatment, normalization of the function of the scintillating epithelium occurred in 22 patients ($P > 0.01$). On the respiratory function of the nasal cavity we judged in terms of rhinopneumonitis proposed L. B. Dainiak and N. S. Melnikova. Before treatment, the patency of the air jet was sharply reduced in 14 patients (patency of the I degree - in 9 people, III y 3, IV - y 2). After treatment in the control group, patency was restored in 12 patients, and in 3 patients remained unchanged. In patients of the main group, patency was restored in 25 patients. The microflora of the nasal cavity did not change under the influence of the treatment. The study of olfactory function before and after treatment also showed no changes. The General condition of patients, weight, blood pressure, urine and blood remained unchanged. As can be seen from the above data, after the applied treatment, the function of the scintillating

epithelium was normalized in many people, and nasal breathing improved. These changes were noted predominantly in patients treated with Aliminum. The results of treatment in terms of 3 to 6 months were followed in 29 patients (9 treated with phonophoresis, and 20 treated with ultrasound). Relapses of diseases with a significant reduction in symptoms were observed in 2 patients treated with ultrasound, and in 5 patients treated with phonophoresis with olive oil (2-3 months after the end of treatment). Based on our observations, we consider the method of ultrasound in the treatment of patients with atrophic rhinitis to be very effective and recommend it for wide use.

REFERENCES

1. Насретдинова М. Т. д-р. Совершенствование диагностики различных форм грибковых риносинуситов // Вестник врача. – С. 27.
2. Joseph C. Segen, Concise Dictionary of Modern Medicine, New York, McGraw-Hill, 2006.
3. Douglas M. Anderson; A. Elliot Michelle, Mosby's medical, nursing, & Allied Health Dictionary sexta edizione, New York, Piccin, 2004.
4. Насретдинова М.Т., Матниязов Г. А., Самиева Г. У. Местное применение

мази Мирамистин-Дарница с эндоауральной локальной аэрацией кислородом при консервативном лечении детей, больных хроническим гнойным средним отитом //Журнал вушних, носових і горлових хвороб. – 2013. – №. 1. – С. 26-29.

5. Насретдинова М. Т., Кодиров О. Н., Хушвакова Н. Ж. Совершенствование топической диагностики и комплексной реабилитации у детей //Инновационные технологии в медицине детского возраста северо-кавказского федерального округа. – 2017. – С. 219-223.