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Modern Solutions to Improve Surgical Treatment Methods for Patients with Nasal Diseases

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Abstract: A curvature can occur either as a result of direct trauma to the nose, or develop gradually as a person grows - a fall, birth injuries, but it seems unlikely that this is the case. This is due to the long development period.

The nasal septum consists of cartilaginous and bony structures that divide the nasal cavity into two relatively equal halves and determine the direction of airflow in the nose. This allows for normal development of free nasal breathing, warming and humidifying of the inhaled air, normal functioning of other protective functions of the nose, and the development of the sense of smell.

Key points: nasal plate, nasal septum correction, surgical instructions.

The usual period of incapacity for work is 14-15 days. A little later, 2-6 weeks after the operation, nasal breathing begins to develop.

In 2 weeks, the main stage of the treatment of the nasal septum takes place. However, you should be aware that during this time the new breathing comfort cannot be fully achieved, and the final nasal breathing begins to form only 3-6 weeks after the operation. For free breathing and comfort, the nasal mucosa should be completely treated. Moreover, this healing time depends mainly on the intervention on the inferior nasal turbinates, which is performed simultaneously with the correction of the nasal septum, and not on the operation on the nasal septum. Working with these structures has a great influence on the presence of crusts in the nose after surgery and on the full recovery of the patient.

There are methods of operating on the nasal septum using a special video camera – an endoscope, which is not a necessity but an option.

The choice of additional equipment during the operation (endoscope, laser, high-frequency coagulator) is the sole responsibility of the specialist, not the patient. An incorrect or improperly used tool not only does not help, but also complicates its use. Only the surgeon knows how much this or that tool will help in performing the operation.

Almost always, surgery on the nasal septum (before and after photo) is combined with the simultaneous correction of other intranasal structures – the nasal turbinates.

These formations of the nasal cavity greatly impair nasal breathing, and their malfunction can lead to the development of the pathology "vasomotor rhinitis". When the nasal septum deviates, the nasal turbinates often acquire their curved shape and become asymmetrical. In this case, even with normal functioning without correction, it is difficult to achieve good nasal breathing by surgery on the nasal septum. Since one-time correction of nasal deposits and nasal septum is used everywhere,

doctors often talk about correction of the nasal septum, that is, correction of these structures in one step. In some institutions, rhinoplasty is immediately included in the price of the operation, while in others it can be a separate component. However, to restore good nasal breathing, it is still inseparable from surgery on the nasal septum.

In modern medicine, local anesthesia is not used for complete procedures, but can only be used for minor corrections.

As for pain relief, such anesthesia does not eliminate the unpleasant sensations in the nose (other types of receptors are responsible for this, anesthesia does not affect them) and is very negatively perceived by the patient during long or large-scale procedures (dentists for these reasons prefer to work with the patient for no more than 30-40 minutes - the person gets tired of unpleasant sensations and procedures in the nasal cavity are perceived more unpleasantly than in the oral cavity). Anesthesia allows the surgeon to concentrate directly on the operation and does not need to be distracted by talking with the patient (which often plays an important role in the patient's inner peace). Mandatory blood pressure control during anesthesia allows to control and reduce bleeding during the operation, which has a positive effect on both the results of the surgeon's work and the well-being of the postoperative patient due to minimal blood loss.

surgery to repair the nasal septum

It is important to understand that operations can eliminate functionally important disorders, that is, they lead to the development of pathologies that cause discomfort to the patient or hidden problems in his body. Small deviations of the nasal septum that do not cause problems with nasal breathing or contribute to the development of other pathologies are usually not subject to surgical correction.

The aim and procedure of the operation is to separate the crooked bony and cartilaginous structures of the nasal septum, partially remove them and straighten the rest as much as possible, while preserving, keeping intact or restoring the mucous membrane that covers the nasal septum. Supporting parts of the nasal septum. Entry is through the patient's nostrils. Since there are no external incisions, the operation leaves no visible scars. Septum septoplasty does not change the external shape of the nose, so this procedure is not visible to others.

A “cold” tool (scalpel, etc.) is mainly used to carry out the operation. Laser and high-frequency technologies, which are popular with many, are also helpful.

They are used primarily to repair the nasal turbinates, sometimes to make incisions in the nasal septum or to treat cartilage and stop bleeding. In most cases, complete correction of the nasal septum requires work on bony structures, where lasers or other destructive coagulation techniques do not bring any benefits. Nevertheless, we often come across patients who need laser correction of the nasal septum, which is the only modern method and firmly believe that the cold instrument is a thing of the past. Unfortunately, this is not the case, one can even say the opposite. The laser, which has excellent hemostatic (hemostatic) properties under the influence of high temperatures, burns or "welds" the tissue, and yet in terms of the cleanliness of the cut and the duration of treatment, it cannot compare to a good sharp scalpel. The world's leading clinics "still" use classic instruments when working on the nasal septum, and their standards do not provide for the mandatory use of a laser in operations on the nasal septum. But in defense of the laser, we can say that it is very convenient for operations on the nasal turbinates due to its hemostatic effect, although there are many other less effective methods, such as electrical and thermal effects (including cryocoagulation, popular in Russia) and the use of ultrasound and radiofrequency surgical methods.

Chronic diseases of the paranasal sinuses

Correction of the nasal septum can also be performed in patients with chronic inflammatory diseases (sinusitis) who do not have significant difficulties in nasal breathing. Due to the curvature of the nasal septum, the "incorrect" redistribution of airflow can lead to permanent irritation of the mucous membrane, infections or disturbances in the ventilation of the paranasal sinuses and the occurrence of problems in them.

Good development of paranasal sinuses (polyps, cysts, mucoceles, pyoceles, etc.).

Violation of paranasal sinus ventilation due to significant curvatures of the nasal septum and the direction of air flow in the nasal cavity not only contributes to the occurrence of chronic inflammatory phenomena of the mucous membrane of the nasal cavity and paranasal sinuses, but also contributes to the appearance of benign formations such as cysts or polyps.

Major operations on the paranasal sinuses (polyps of the nasal cavity and paranasal sinuses) or the skull base (pituitary adenoma).

When the surgeon is working in the deep structures of the nasal cavity and paranasal sinuses, even a slightly deviated nasal septum can be an obstacle. Septoplasty is often performed during major surgeries, including neurosurgical procedures - for example, when removing a pituitary adenoma.

blood clotting disorders

Blood clotting disorders can be caused not only by blood diseases, but also by the constant intake of medications, for example ThromboASS based on aspirin (acetylsalicylic acid) and others.

Surgery is not recommended for women during menstruation.

This leads to impaired blood clotting and increases blood loss during surgery.

chronic diseases in the acute stage (gastric ulcer, cholecystitis, etc.) and decompensation of chronic diseases (diabetes mellitus, coronary heart disease, hypertension). Professional approval is required, and preparatory preparation may be necessary.

Headaches of unknown cause

Constant contact of the mucous membrane of the lateral walls of the nasal cavity and nasal conchae with protruding parts of the nasal septum (ridge, spines) can lead to irritation of nerve nodes and reflex pain in the head. It is often difficult for both the patient and the specialist to recognize this connection. Often, this category of patients begins treatment with a neurologist and comes to the ENT surgeon only after other causes and the ineffectiveness of conservative treatment have been excluded. By eliminating disturbing factors in the form of a protrusion of the nasal septum in contact with the mucous membrane of the lateral walls, the patient's pain can be alleviated or even eliminated.

Ear diseases (chronic otitis, sticky otitis)

In case of chronic problems of the middle ear and eardrum, it is also recommended to eliminate severe curvatures of the nasal septum as a first step. The middle ear cavity, located behind the eardrum, receives air from the nasal cavity through the ear canal. Deviations of the nasal septum can make it difficult to ventilate this space properly. Chronic changes gradually develop in the form of a perforation (hole) in the eardrum, chronic inflammation, scarring or cholesteatoma in the middle ear with gradual hearing loss appear. Ignoring this problem can lead to ineffective ear surgery. After ear surgery, normal ventilation of the middle ear cavity is especially important and has a direct impact on the effectiveness of treatment. Usually, nasal septum repair is performed as the first step of ear surgery 2–6 months before the main surgery. It is not recommended to combine operations on the nose and ears, since nasal breathing does not recover immediately after surgery.

Since the surgery is not an emergency, there is no need to take additional risks from a cold or other acute illness. If you are ill, contact the surgeon and reschedule the surgery. You can usually postpone the surgery for two weeks until you are fully recovered.

Old

Due to impaired healing processes and recovery of the body, surgery is not recommended in old age. This indicator is considered separately depending on the presence of concomitant diseases. For people over 70 years of age, the decision for surgery is made individually.

childhood

The nasal septum is involved in the formation of the external nose during the child's growth, which is most active in adulthood. However, due to the same growth, the child increases the need for normal nasal breathing. Stress from heavy workloads and emotional experiences at school also negatively affects the body. Oxygen deficiency caused by a significant violation of nasal breathing can have a negative effect during this period. Operations under the age of 16 are performed only after the doctor has fully clarified the possible positive and negative consequences for the child. Often, correction is performed only when there is significant difficulty breathing and a strong curvature of the nose. The principle of gentle correction is important for the doctor - when the goal is not to have a "perfectly flat" nasal septum, but to improve nasal breathing to "acceptable". In some cases, additional correction of the nasal septum is possible after the end of childhood (20-25 years).

How to prepare for surgery

Stop taking medications that affect blood clotting - anticoagulants (aspirin, thromboASS, acetylsalicylic acid, etc.) within 2 weeks. Before stopping anticoagulants, you should consult a doctor. If stopping the medication is not possible, inform the surgeon and discuss a possible change in therapy with the attending physician.

In the presence of concomitant diseases (coronary heart disease, hypertension, bronchial asthma, gastric ulcer, etc.), consult a doctor about the possibility of surgery and the need for preoperative preparation.

It is recommended to stop smoking and not drink alcohol 2 weeks before surgery

For women: Stop taking hormonal contraceptives 1 month before surgery or consult a gynecologist. This is especially important in case of varicose veins.

If your nose is very dry, you should contact your ENT doctor 2-4 weeks before the operation. Dry mucous membranes and noticeable crusts can have a negative impact on the operation and the postoperative period.

A day before the operation, the patient is admitted to the institute clinic and spends the night in the room assigned to him. The next day, the operation is performed according to the operation plan. Immediately before the operation, the patient is given anesthesia and falls asleep. During the operation and some time after it, the patient is asleep (under anesthesia). Immediately after the operation and until 8 am the next day, the patient is in the intensive care unit, where he is constantly monitored by the nurse on duty, seen by the doctor on duty and his condition is monitored. You can not leave this room. But from the next day he is transferred to the ward, where he will stay for another 3-4 days until he is discharged from the hospital. During this time, he will be looked after and the procedures necessary for a comfortable recovery will be performed. Usually, the tampons inserted during the operation from the nasal cavity are removed on the second day, and after another 1-2 days the patient is discharged home.

Postoperative care and aftercare

- Postoperative care in the hospital primarily includes the treatment regimen and monitoring of the medical treatment process. Without the surgeon's recommendation, the patient does not do anything independently.
- After discharge from the hospital, the patient spends the first week at home. It is recommended to maintain a home lifestyle, increase physical activity, avoid crowded places and follow the recommendations. Often it is prescribed to wash the nose with a large amount of saline solution up to 1 liter (Delfin, Aqua-Maris, etc.).
- After returning to work, the patient should gradually enter the natural rhythm of life and gradually resume physical activity

List of literature used:

1. Abdurashidovich N. O., Zamonbek o‘g‘li B. F., Temirpulotovich T. B. Assessment of the relationship of the degree of conformity in patients with schizophrenia with clinical features and socio-demographic factors //European journal of modern medicine and practice. – 2024. – T. 4. – №. 2. – C. 22-30.
2. Antsiborov S. et al. Association of dopaminergic receptors of peripheral blood lymphocytes with a risk of developing antipsychotic extrapyramidal diseases //Science and innovation. – 2023. – T. 2. – №. D11. – C. 29-35.
3. Asanova R. et al. Features of the treatment of patients with mental disorders and cardiovascular pathology //Science and innovation. – 2023. – T. 2. – №. D12. – C. 545-550.
4. Begbudiyev M. et al. Integration of psychiatric care into primary care //Science and innovation. – 2023. – T. 2. – №. D12. – C. 551-557.
5. Biktimirova G., Turayev B., Ochilova N. Features of the pathokinesis of adaptation disorders in men with mild forms of cardiovascular disease //Modern Science and Research. – 2024. – T. 3. – №. 1. – C. 602-610.
6. Bo’Riyev B. et al. Features of clinical and psychopathological examination of young children //Science and innovation. – 2023. – T. 2. – №. D12. – C. 558-563.
7. Borisova Y. et al. Concomitant mental disorders and social functioning of adults with high-functioning autism/asperger syndrome //Science and innovation. – 2023. – T. 2. – №. D11. – C. 36-41.
8. Hamdullo o'g'li J. H., Temirpulotovich T. B. Features of the Clinical Course of Post-Traumatic Epilepsy, Psychiatric and Neurosurgical Approaches //International Journal of Cognitive Neuroscience and Psychology. – 2024. – T. 2. – №. 2. – C. 8-14.
9. Hamdullo o'g'li J. H., Temirpulotovich T. B. Features of the Clinical Course of Post-Traumatic Epilepsy, Psychiatric and Neurosurgical Approaches //International Journal of Cognitive Neuroscience and Psychology. – 2024. – T. 2. – №. 2. – C. 8-14.
10. Ibragimova M., Turayev B., Shernazarov F. Features of the state of mind of students of medical and non-medical specialties //Science and innovation. – 2023. – T. 2. – №. D10. – C. 179-183.
11. Konstantinova O. et al. Experience in the use of thiamine (vitamin B1) megadose in the treatment of korsakov-type alcoholic encephalopathy //Science and innovation. – 2023. – T. 2. – №. D12. – C. 564-570.
12. Kosolapov V. et al. Modern strategies to help children and adolescents with anorexia nervosa syndrome //Science and innovation. – 2023. – T. 2. – №. D12. – C. 571-575.
13. Lomakin S. et al. Socio-demographic, personal and clinical characteristics of relatives of patients with alcoholism //Science and innovation. – 2023. – T. 2. – №. D12. – C. 278-283.
14. Murodullayevich K. R., Holdorovna I. M., Temirpulotovich T. B. The effect of exogenous factors on the clinical course of paranoid schizophrenia //Journal of healthcare and life-science research. – 2023. – T. 2. – №. 10. – C. 28-34.
15. Nematillayevna S. D. et al. Features of non-psychotic diseases and cognitive disorders in organic brain damage of vascular genesis in elderly people //Amaliy va tibbiyot fanlari ilmiy jurnali. – 2024. – T. 3. – №. 2. – C. 124-130.
16. Nematillayevna S. D. et al. Prevalence of anxiety and depressive disorders in elderly patients //Scientific journal of applied and medical sciences. – 2024. – T. 3. – №. 2. – C. 118-123.
17. Novikov A. et al. Alcohol dependence and manifestation of autoagressive behavior in patients of different types //Science and innovation. – 2023. – T. 2. – №. D11. – C. 413-419.