



Diagnosis and Treatment of Benign Vascular Formations of the Nosal Cavity

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Abstract: The relevance of the chosen topic. Vascular tumors account for up to 1-7% of all benign human neoplasms. From 60 to 80% of these tumors are localized in the head. Despite the fact that the nasal cavity is considered an unusual location for hemangiomas, its share in the structure of all neoplasms is 2–3%, and among benign ones it is 7% [1]. Hemangioma occurs in all age groups, there are several peaks: children and adolescents, women of reproductive age, and then there is a uniform distribution in the group over 40 years old. Hemangiomas can affect almost all organs and tissues of the body, but the most common starting point for angiomatous growth is the skin, subcutaneous tissue, oral and nasal mucosa [3]. For a long time in scientific circles, the question of what constitutes a hemangioma was resolved: a true tumor or a pathological congenital development of the vascular system [5].

Key words: Treatment, Diagnosis.

Purpose of the study. Improve early diagnosis and evaluate the effectiveness of complex treatment of patients with benign vascular formations (hemangiomas) of the nasal cavity.

Material and research methods. This study was carried out at the Department of ENT Diseases of the FPGE Sam MU. The collection of material was carried out in the period from 2009 to 2022 at the ENT clinic No. 1 of SamMU. For the period 2009 - 2022 In total, 102 patients were examined and treated in the clinic. The age of the patients ranged from 18 to 72 years, the average age was 29.4 ± 4.4 years. Among them, there were 55 females, 47 males. The average age of the observed men was 31 ± 2.3 years, women - 34.4 ± 1.9 years.

The patients included in the development were divided into 2 groups.

The first group: 79 (77.5%) patients with BVFNC (benign vascular formations of the nasal cavity).

The second group: 23 (22.5%) patients with BVTFNC (benign vascular tumor-like formations of the nasal cavity).

Among patients with BVFNC, there were 55 (53.9%) females and 47 (46.1%) males. The first group was dominated by female patients (58.2%), while the second group was dominated by men (60.9%). Patients of the first group made up the majority of all persons included in the development, that is, the ratio of both groups was 77.5% to 22.5% (see table).

Table. Benign vascular formations of the nasal cavity.

Nosological unit	Absolute number	%
I. Benign vascular tumors of the nasal cavity		
Hemangioma	33	41,8
Bleeding polyp	46	58,2
TOTAL	79	100
II. Benign vascular tumor-like formations of the nasal cavity		
Rhinolit	13	56,5
Vascular hyperplasia of the inferior turbinate	7	30,4
Vascular malformation of the inferior turbinate	3	13,1
TOTAL	23	100

In the first group, 58.2% of patients had a hemangioma of the nasal cavity and 41.8% a bleeding polyp of the nasal cavity. In the second group, patients with rhinolith accounted for 56.5%, vascular hyperplasia of the inferior turbinate 30.4%, vascular malformation of the inferior turbinate 13.1%. According to the x-ray image, signs of the inflammatory process in group III were detected in 15 (60%) patients before treatment, and after treatment they were not observed. Endoscopy revealed signs of a neoplasm in 13 (52%) patients before treatment; in the postoperative period, these changes regressed in all (100%) patients. In patients of group III, CT was performed in 10 (40%) patients, MRI was performed in 8 (32%) patients before treatment. Positive results were noted in all (100%). After treatment, normal microbiocenosis of NC was restored in patients of group III.

Results of the study and their discussion. The use of anise essential oil together with TL caused a positive dynamics of clinical symptoms and restoration of endogenous intoxication indicators to control values: nosebleeds and impaired sense of smell were observed only in 1 (4%) case; increased MDA (malonic dialdehyde) decreased by 42.6%, CA (catalase activity) increased by 60.0%, the MDA/CA ratio decreased by 80.4%, which did not differ from normal values. Anise essential oil reduced the concentration of MMM₂₅₄ (medium mass molecules) and MMM₂₈₀ (medium mass molecules) by 45.0% and 35.5%, respectively. If this effect is compared with the use of actovegin,

then relative to the standard treatment, MMM254 and MMM280 were 63.6 and 72.5%, respectively, and the PSC (protein stability coefficient) was 18.2%, which significantly brought it closer to the indicators of the healthy group.

Thus, it can be stated that the inclusion of anise essential oil in the complex of therapeutic measures for patients with benign vascular formations of the nasal cavity gave positive results, which in turn improves the quality of life of patients in this category and can be recommended for safe use in practical otorhinolaryngology.

Conclusions. In patients with vascular tumors of the nasal cavity, a significantly high increase in MDA up to 87.4% was detected against the background of a decrease in catalase activity up to 68.9%, accumulation of MMM254 up to 112.5% and MMM280 up to 60.7%, while the PSC increased to 75, 9%, and the MDA/CA ratio increased 6 times. The above can be used as additional criteria in the diagnosis of vascular tumors.

It has been established that vascular tumors of the nasal cavity are characterized by the accumulation of MMM and MDA, which lead to increased destruction of erythrocytes, the hemostasis system is activated, leading to thrombophilic disorders, cytolytic syndrome, and, as a result, depletion of the synthetic function of the liver.

The use of anise essential oil in the treatment of vascular tumors of the nasal cavity is substantiated. A positive effect of anise essential oil on endotoxemia was revealed, which is expressed in an increase in the activity of catalase and PSC, as well as a decrease in MDA, MMM to control values. Improved treatment leads to a decrease in the number of relapses of the neoplasm and bleeding up to 4%.

References

1. Antoniv, T.V. Capillary hemangioma of ENT organs (clinic, diagnosis, treatment). / T.V. Antoniv, N.I. Casanova, I.N. Grigorieva // Journal: Bulletin of Otorhinolaryngology. - 2012; -77(1): - p. -11-13.
2. Bogomilsky, M.R. Acute sinusitis in children and their rational therapy // J. Rhinology. - 2012.- No. 3.- P.41-48.
3. Lutfullaev, G.U. A case from practice: hemangioma of the nasal cavity in a pregnant woman / G.U. Lutfullaev, U.L. Lutfullaev, U.S. Nematov, N.I. Safarova // Scientific and practical journal "Bulletin of Science and Education" - No. 10 (88). - 2020. - Moscow. -p. - 89-93
4. Lutfullaev, U.L. Methods for the diagnosis and treatment of hemangiomas of the nasal cavity and paranasal sinuses. / G.U. Lutfullaev, N.I. Safarova // International scientific journal. "Problems of biology and medicine". - No. - 2 (94), - Uzbekistan, - Samarkand. - 2017, - p. -196-197
5. Cho, H.J., Endoscopic surgery for inverted papilloma originating from the sphenoid sinus and related clinical characteristics / H.J. Cho, J.K. Kim, K. Kim // Acta Otolaryngol.-2018.-V.128.- № 10.- P. - 1120-1125.
6. .Лутфуллаев, Г. У., Лутфуллаев, У. Л., Валиева, Н. К., Кобилова, Ш. Ш., & Валиева, С. Ш. (2020). Гигантская фибропапиллома ушной раковины. Клинические наблюдения. Вопросы науки и образования, (18 (102)), 28-32.
7. Лутфуллаев, Г. У., Кобилова, Ш. Ш., Ньматов, У. С., & Мусурмонов, Ф. Ш. (2019). Опыт применения локальной иммунокоррекции в лечении экссудативного среднего отита у больных с доброкачественными опухолями носа, околоносовых пазух и носоглотки. Вестник КГМА им. ИК Ахунбаева, (2), 55-57.

8. Лутфуллаев, Г., Кобилова, Ш., Хамраев, Ф., & Асророва, Ф. (2015). Усовершенствование лечения больных с юношеской ангиофибромой носоглотки. *Stomatologiya*, 1(3 (61)), 149-151.
9. Lutfullayev, G. U., Lutfullayev, U. L., & Kobilova, S. H. SH., Ne» matov US Distance Learning Experience in the COVID-19 Pandemic [Internet]. *Problemy pedagogiki= Problems of Pedagogy*. 2020; 4 (49).
10. Lutfullaev, G., Lutfullaev, U., Kobilova, S., Safarova, N., & Valieva, N. (2021). Exudative Otitis Media-Early Symptom of Junior Nasopharyngeal Angiofibroma. *Annals of the Romanian Society for Cell Biology*, 111-114.
11. Lutfullaev, G., Lutfullaev, U., Nematov, U., Hamraev, F., & Fayzullaev, D. (2021). Clinical Characteristics of Vascular Tumors of ENT Organs. *Annals of the Romanian Society for Cell Biology*, 104-110.
12. Лутфуллаев, У., Кобилова, Ш., & Нейматов, У. (2020). ОПЫТ ИСПОЛЬЗОВАНИЯ ПЛАТФОРМЫ ZOOM В ДИСТАНЦИОННОМ ОБУЧЕНИИ В УСЛОВИЯХ ПАНДЕМИИ COVID-19. *Журнал кардиореспираторных исследований*, 1(SI-1), 59-59.
13. Лутфуллаев, Г. У., Лутфуллаев, У. Л., Нейматов, У. С., & Сафарова, Н. И. (2020). Случай из практики: гемангиома полости носа у беременной женщины. *Вестник науки и образования*, (10-4 (88)), 89-92
14. Валиева, Н., Нейматов, У., & Махмудова, Н. (2014). Отогенный менингит. *Журнал проблемы биологии и медицины*, (3 (79)), 93-94.
15. АНТОНИВ, В. Ф., КОЛОДИЙ, Н. В., АКСЕНОВ, В. М., & ЛУТФУЛЛАЕВ, У. Л. (1991). Способ хирургического лечения заболеваний среднего уха
16. Шокировна, Қ. Ш., Умриллаевич, Л. Ғ., ВАЛИЕВА, Н. К., & ХАМРАЕВ, Ф. Х. БУРУН, БУРУН ЁН БЎШЛИҚЛАРИ ВА БУРУН-ҲАЛҚУМ ХАВФСИЗ ЎСМАЛАРИДА ЭКССУДАТИВ ЎРТА ОТИТ. *БИОМЕДИЦИНА ВА АМАЛИЁТ ЖУРНАЛИ*, 85.
17. ЛУТФУЛЛАЕВ, У., ВАЛИЕВА, Н., ХАМРАЕВ, Ф., ВАЛИЕВА, С., & АБДУРАХИМОВА, А. БОЛЕЗНЬ ВЕГЕНЕРА В ПРАКТИКЕ ОТОЛАРИНГОЛОГИИ.