

Clinical Case of a Patient with a Hemangioma of the Nasal Cavity

Lutfullayev G. U. *, Nematov U. S., Safarova N. I.

Department of Otorhinolaryngology, Faculty of Postgraduate Education, Samarkand State Medical University, Uzbekistan

Abstract This article presents a case of hemangioma of the nasal cavity, diagnosed in a patient at 30 weeks of pregnancy, with complaints of lack of nasal breathing, anosmia and periodic nosebleeds, significant difficulty in nasal breathing. Treatment is complete removal by endonasal method.

Keywords Capillary hemangioma, Nasal septum, Nosebleed

Hemangioma is a benign neoplasm of vascular origin with epithelial proliferation. Most often refers to congenital lesions of the skin and mucous membrane of the oral cavity, while the nasal cavity and paranasal sinuses are considered an unusual location for hemangiomas. On the head and neck, 38% of the location is found on the lip mucosa, 7-29% - in the nasal cavity (often in the anterior parts of the nasal septum, on the nasal shells, cases of development from the maxillary sinus, roof and bottom of the nasal cavity have also been described). It is the most common benign tumor of the nasal cavity. It occurs in all age groups, there are several peaks: children and adolescents, women of reproductive age, and then there is an even distribution in the group over 40 years old. There are several theories of pathogenesis, more often associated with traumatic tissue damage and hormonal factors (pregnancy, oral contraceptives). The most striking symptomatic manifestations of capillary hemangioma are unilateral nosebleeds and nasal obstruction. Histologically characterized by vascular proliferation in the submucosal layer, in the form of lobules or clusters consisting of central capillaries and small branching ducts. Treatment is complete removal, preferably by endonasal method. Unfortunately, the recurrence rate after excision can reach 15%.

According to Russian and foreign literature, during pregnancy and in the postpartum period, 27-43% of women turn to otorhinolaryngologists with such nonspecific symptoms as nasal congestion, rhinorrhea, bleeding or anosmia, especially in the third trimester of pregnancy and during lactation, when the reactivity of the nasal mucosa is due to an increased content of estrogens in the blood, which causes vascular dilation and mucosal hypersecretion. Less often, the manifestation of the disease manifests itself with visual impairment, headaches, a local feeling of swelling in

the nose.

The Department of Otorhinolaryngology FPS of the Samarkand Medical Institute has accumulated extensive experience in managing patients with various benign neoplasms of ENT organs. Over the past 5 years, 197 patients with various vascular neoplasms of the nasal cavity, nasopharynx and paranasal sinuses have been treated in the ENT department.

We present a clinical case of a patient with capillary hemangioma of the nasal cavity.

Patient S., (28 years old (pregnancy – 32 weeks) applied in September 2017 presented with complaints of anosmia and periodic nosebleeds from the left half of the nose, significant difficulty of nasal breathing on the left and dry mouth.

The listed symptoms have been noted since one month.

It is known from the anamnesis of the disease that for the first-time bleeding from the left half of the nose occurred at the 30th week of pregnancy, while there was an increase in systemic blood pressure to 140- and 80-mm Hg. The bleeding was stopped by a loose anterior tamponade. At the same time, the patient notes that the intensity and duration of nosebleeds increased with each subsequent time. Indicators of the hemostasis system, the level of hemoglobin in the blood during pregnancy were within acceptable values.

2 weeks before hospitalization, an outpatient otorhinolaryngologist performed an endoscopic examination of the nasal cavity - a neoplasm in the form of a polyp was found in the left half of the nose, which bled during probing. When performing an MRI (without the introduction of a contrast agent) of the nose and paranasal sinuses, a rounded tissue formation of the nasal cavity on the left is determined, filling the posterior parts of the nasal cavity from the middle of the left middle nasal concha to the left choana, with axial dimensions of 2.5x2.0 cm, vertical size up to 3.0-3.5 cm. The formation partially displaces and causes the destruction of the nasal septum. The biopsy of the neoplasm was accompanied by profuse bleeding. According to histological

* Corresponding author:

sammi-xirurgiya@yandex.com (Lutfullayev G. U.)

Received: Jul. 27, 2022; Accepted: Aug. 17, 2022; Published: Sep. 15, 2022

Published online at <http://journal.sapub.org/ajmms>

examination, the tumor consists of small compactly arranged capillaries (Fig. 1).

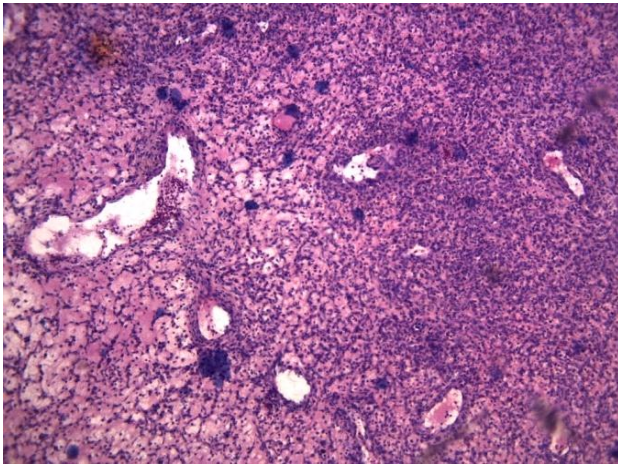


Figure 1. Capillary hemangioma, stained with hematoxylin-eosin

In the department, for 5 days, the patient underwent preliminary hemostatic therapy with the introduction of 5 ml of a 5% solution of trexamine intramuscularly 1 time a day, in order to prevent bleeding during surgery.

Taking into account the MRI data of the paranasal sinuses, it was decided to endonasal removal of the neoplasm.

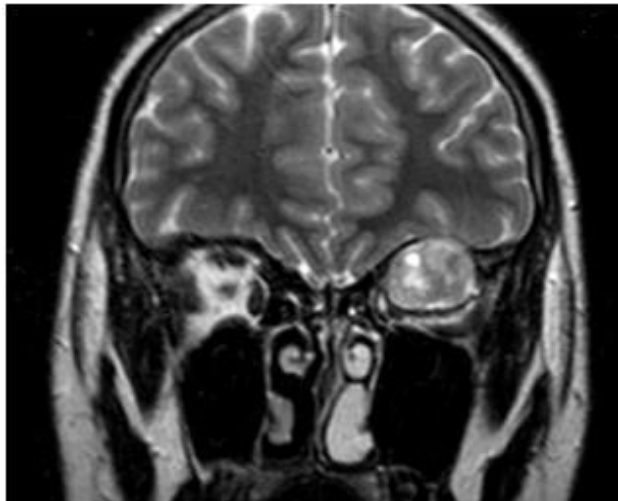


Figure 2. In the MRI image, the hemangioma of the nasal cavity on the left

Under the conditions of local application anesthesia (Sol. Lidocaine 10% 2 ml) of the nasal mucosa, endonasal removal of the neoplasm was performed. Hemostasis with hemostatic swabs in both halves of the nose. The surgical material is aimed at histological examination.

In the postoperative period, the patient received preventive hemostatic and systemic antibacterial therapy under the supervision of a gynecologist. Removal of the tampon from the nasal cavity was performed on the 2nd day after the operation, followed by the introduction of a cotton swab with antiseptic ointment. Further, nasal irrigation therapy with saline solution is recommended for 1 month. 1 month after the operation, an endoscopic examination of the nasal cavity was performed: the mucous membranes of the

nasal cavity are pink, the nasal shells are unchanged, there is no discharge, breathing through the nose is free.

Conclusions

Capillary hemangioma is the most common vascular tumor of the nasal cavity and nasopharynx. However, in the differential diagnosis of vascular neoplasms in the nose, one should not forget about the various histological patterns which determines the MODES of treatment.

Preoperative hemostatic therapy is a necessary step in the treatment of vascular tumors, which reduces the risk of intraoperative blood loss and, what is important for the operating surgeon, clearly visualizes the surgical field during the intervention.

In the outpatient practice of an otorhinolaryngologist, it is necessary to remember about the oncological alertness of all neoplasms of the nasal cavity and nasopharynx, simulating absolutely benign processes. Timely diagnosis of these conditions will allow qualified medical care in the early stages of the disease.

REFERENCES

- [1] Antoniv T.V., Antoniv V.F. Treatment of patients with hemangioma of the nasal cavity and pharynx. // In the book: Actual problems of otorhinolaryngology, collection of articles of the interregional scientific and practical conference of otorhinolaryngologists with international participation, Barnaul, 2007. -pp. 196-197.
- [2] Antoniv T.V. On the treatment of patients with hemangioma ENT organs. // Bulletin of Otorhinolaryngology, 2007, No. 5, pp. 279-280.
- [3] Karpishchenko C.A., Zubareva A.A., Chibisova M.A., Shavgulidze M.A. Digital volumetric tomography in otorhinolaryngology. Practical guide. St. Petersburg: Dialog, 2011.
- [4] Karpishchenko S.A., Vereshchagina O.E., Stancheva O.A. Consequences of rhinological operations. Folia ORL et PR. 2016; 22 (1): 91-4.
- [5] Karpishchenko S.A., Vereshchagina O.E., Osipenko E.B. Benign neoplasms of the paranasal sinuses. Prakt. the medicine. 2015; 87: 2: 104-8. / Karpishchenko S.A., Vereshchagina O.E., Osipenko E.V. Dobrokachestvennyye novoobrazovaniia okolonosovykh pazukh. Prakt. meditsina. 2015; 87: 2: 104-8. [in Russian]
- [6] Krasnopolsky V.I., Melnikov A.P., Bokarev I.N. Modern problems of hemocoagulation disorders in obstetrics // Ross. vestn. akush. - ginek. - 2010. -No.2. -p. 20-27.
- [7] Lutfullayev G.U., Safarova N.I., Nematov U.S., Correction of endogenous intoxication in patients with vascular tumors of the nose. // Biology of va tibbiet muammolari J. 2021, No. 5 (130). pp. 73-78.
- [8] Lutfullayev U.L., Lutfullayev G.U., Safarova N.I. Methods of diagnosis and treatment of hemangiomias of the nasal cavity and paranasal sinuses. // International Scientific Journal. "Problems of biology and medicine". No. 2 (94), Uzbekistan,

Samarkand. 2017, pp. 196-197.

- [9] Armulik A., Genové G., Betsholtz C. Pericytes: developmental, physiological, and pathological perspectives, problems, and promises // *Dev. Cell.* – 2011. – 21 (2). – P. 193–215. 2. Fletcher C.D. The evolving classification of soft tissue tumours: an update based on the new WHO classification // *Histopathology.* – 2006, Jan. – 48 (1). – P. 3–12.

- [10] Tamaki A, Babajanian E, D'Anza B, Rodriguez K. Lobular capillary hemangiomas: Case report and review of literature of vascular lesions of the nasal cavity. *Am J Otolaryngol* 2017; 38: 363-6.

Copyright © 2022 The Author(s). Published by Scientific & Academic Publishing

This work is licensed under the Creative Commons Attribution International License (CC BY). <http://creativecommons.org/licenses/by/4.0/>