A CLINICAL CASE OF LOBULAR CAPILLARY HAEMANGIOMA OF THE NASAL CAVITY DURING PREGNANCY

Gairat U. Lutfullaev - D.M.Sc., professor
Oktam S. Nematov - Ph.D.
Samarkand State Medical University (Samarkand, Uzbekistan)
sammudktflor@gmail.com

Abstract. *A benign lesion called a lobular capillary haemangioma originates in the vascular tissue of the skin, mucosa, muscles, glands, and bones. These lesions spread quickly. Rarely occurs nasal localization. Pregnancy and microtrauma are the two most frequently suggested aetiological reasons. Pregnancy-related incidence has been reported to range from less than 2% to roughly 5%. Depending on the severity of the symptoms and the stage of the pregnancy, the treatment of a pregnant woman with such a lesion may be complicated. The preferred course of treatment is complete surgical excision, either with or without pre-operative embolization.*

Keywords: *capillary hemangioma, nasal septum, nose bleeds, nasal cavity, pregnancy, pathology.*

Introduction. Hemangiomas are benign tumors that arise in the vascular tissue of the skin, mucous membranes, muscles, glands, or bones [1,4,7,9]. Lobular capillary hemangioma (LCH), also known as pyogenic granuloma or pregnancy granuloma, is a rapidly growing lesion with extensive endothelial proliferation [2,5,12]. This lesion typically appears in the oral cavity and is rarely found in the nasal region. The etiology of LCH during pregnancy remains unclear [3,6,8]. The most widely accepted hypothesis suggests that this lesion may result from an interaction between local irritants and subsequent tissue inflammation, amplified by female sex hormones produced during pregnancy [2,5]. LCH generally resolves after childbirth, and endoscopic endonasal total excision is usually the definitive solution.

Clinical case. A 30-year-old pregnant woman at 32 weeks of gestation was admitted in September 2022 with complaints of nasal congestion, anosmia, periodic nasal bleeding from the left side, severe left-sided nasal dyspnea, and dry mouth. These symptoms had been present since August 2023. The patient's history revealed that the first left-sided nasal bleeding occurred at 30 weeks of pregnancy, accompanied by a rise in systemic arterial blood pressure to 140/80 mm Hg. The bleeding was stopped with soft anterior nasal packing. The patient noted that the intensity and duration of the nasal bleeding increased with each subsequent episode. Hemostasis test results and the patient's hemoglobin levels were within acceptable ranges. Two weeks before admission, an ENT specialist performed an outpatient endoscopy of the nasal cavity and found a polyp-like neoplasm on the left side of the nose, which bled upon palpation. An MRI of the nose and sinuses (without contrast) revealed a round tissue mass in the left nasal cavity, filling the posterior part 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 and vertical dimensions of no more than 3.0-3.5 cm. The neoplasm was partially displaced, leading to the destruction of the nasal septum. A biopsy of the neoplasm was accompanied by massive bleeding. Histological examination (capillary hemangioma) revealed that the tumor consisted of small, dense capillaries (Fig. 1). Complete blood count: Hb - 80; erythrocytes – 3.0; CP – 0.9; leukocytes – 10.8; ESR – 23 mm/s; Coagulation (Sukhorev's test): initial – 2.4; final – 3.8; platelets – 188; eosinophils – 6; neutrophils (banded) – 5; segmented neutrophils – 82; lymphocytes – 53; monocytes – 11. ECG: No abnormalities

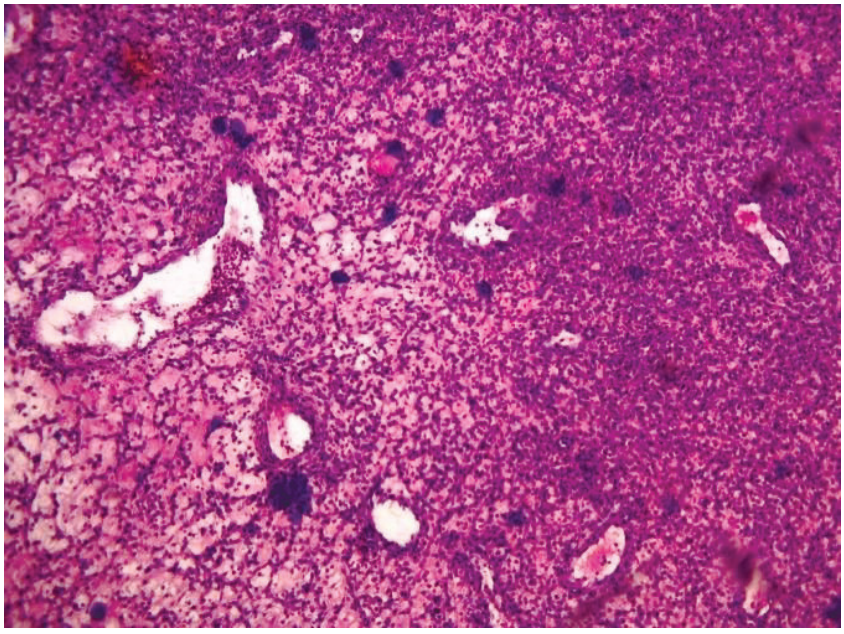

Fig. 1. Capillary hemangioma, hematoxylin-eosin staining (x120)

During the five-day hospitalization, preoperative hemostatic therapy was administered to prevent intraoperative bleeding, using 5 ml of 5% tranexamic acid solution, intramuscularly once a day. Under local anesthesia of the nasal mucosa (2 ml of 10% lidocaine solution), an endonasal excision was performed. Hemostatic tampons were used to control bleeding on both sides of the nasal cavity. In the postoperative period, the patient received preventive hemostatic therapy and systemic antibacterial treatment under the supervision of an obstetrician. On the second postoperative day, the tampon was removed from the nasal cavity, and a cotton tampon with antiseptic ointment was placed. Further nasal irrigation with saline solution was recommended for a month. The nasal mucosa appeared pink, the nasal passages were unchanged, there was no discharge, and nasal breathing was unobstructed. During a follow-up examination on the 21st day (November 15, 2022), the patient complained of nasal congestion and dryness of the nasal mucosa.

The postoperative period proceeded without complications. The nasal passages were irrigated daily (twice a day). The patient was discharged on the 5th day in satisfactory condition. The biopsy results remained unchanged compared to the preoperative findings (final diagnosis: capillary hemangioma of the nasal septum with erosions).

One month after surgery, the patient continued anticancer therapy with tamoxifen (20 mg/day). During a scheduled follow-up anterior rhinoscopy, thickening of the nasal mucosa was found at the upper edge of the nasal septal perforation. This thickening was excised on February 11, 2023, under local anesthesia using a high-frequency scalpel. The biopsy confirmed that the thickening was a hemangioma. No postoperative complications were observed. The patient is under outpatient observation.

Three months after discharge, the patient returned to the hospital due to nasal bleeding and a headache. A repeat CT scan showed no signs of mass formation. At the 6-month follow-up after surgery, the patient reported no complaints and no signs of recurrence. Microbiological analysis was negative. Thus, functional disorders and nasal bleeding did not completely resolve with conventional treatment.

Conclusion. Lobular capillary hemangioma during pregnancy is a benign condition that typically manifests in the third trimester. The most common clinical presentation is nasal bleeding. Nasal LCH can be treated surgically with a relatively low risk of recurrence.

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