MASSON HEMANGIOMA- AN UNUSUAL CASE OF RECURRENT MASS INVOLVING MAXILLARY SINUS, NASAL CAVITY, AND NASAL SEPTUM. A CASE REPORT

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ABSTRACT

Masson hemangioma is a rare pathological entity that can involve any part of the body, characterized by intravascular papillary endothelial hyperplasia. The most commonly involved sites of Masson hemangioma are skin, subcutaneous tissue, and lips. Rarely does it involve the spinal cord and the head and neck region. This usually presents multiple benign and malignant lesions, so a differentiation should be made in diagnosis and proper clinical Management.

Key Words: benign tumor, intravascular papillary endothelial hyperplasia, Inverted Papilloma.

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INTRODUCTION

Masson Hemangioma, also known as Masson vegetated intravascular hemangioendothelioma, considered as a papillary hyperplasia of Endothelial vascular cells, is a rare disease that usually develops in veins but rarely also occurs in arteries. [1]

It is considered a vascular proliferation secondary to vascular stasis that can develop in the head and neck region, hands, tendons, digestive tract, intracranial and abdominal areas [2]. Masson tumors can also occur in the eyelid [3], orbit, and conjunctival involvement is also reported [4].

A case of Masson Hemangioma involving the spinal cord, causing compressive myelopathy, has also been reported, which presents with paraplegia as extradural compression at the T4-5 level [5].To the best of our search and literature, 10 cases of Masson hemangioma are reported, but not with multiple time recurrences [6]. We are presenting our case report because of involves multiple recurrences and has been operated on multiple times.

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CASE DESCRIPTION

A 28-year-old male presented with a history of Nasal obstruction and bleeding from the left side of his nose for the last 2 years. On examination, there was a fleshy mass occupying the left nasal cavity. Nasal endoscopy showed the same findings. The right side of the nose was normal on examination.

The nasopharynx and neck show no pathologies. The Patient has been operated on for the same mass 5 times via trans-nasal approach. CT scan of Paranasal Sinuses shows a Heterogeneous mass occupying the Left Nasal cavity and maxillary sinus with involvement of the medial wall of the maxillary sinus and nasal septum. A probable diagnosis of Inverted papilloma was made due to its recurrent nature and fleshy appearance.

Endoscopic Sinus Surgery under General Anesthesia was planned. Medial Maxillectomy and excision of the whole mass were performed. A biopsy of the mass was performed and turned out to be Intravascular endothelial papillary hyperplasia, Masson's Hemangioma.

Histopathological Slides show a large vessel with papillary endothelial proliferation accompanied by inflammation and hemorrhage.

A CT PNS (without contrast) shows soft tissue thickening in the left maxillary sinus. It causes the widening of the osteomeatal complex and thus extends to the nasal cavity and fills it. Mucosal thickening of the right

maxillary sinus was seen.

DISCUSSION

A patient with ulcerated, irreducible hemorrhoids was detected by Masson in 1923, and the lesion was

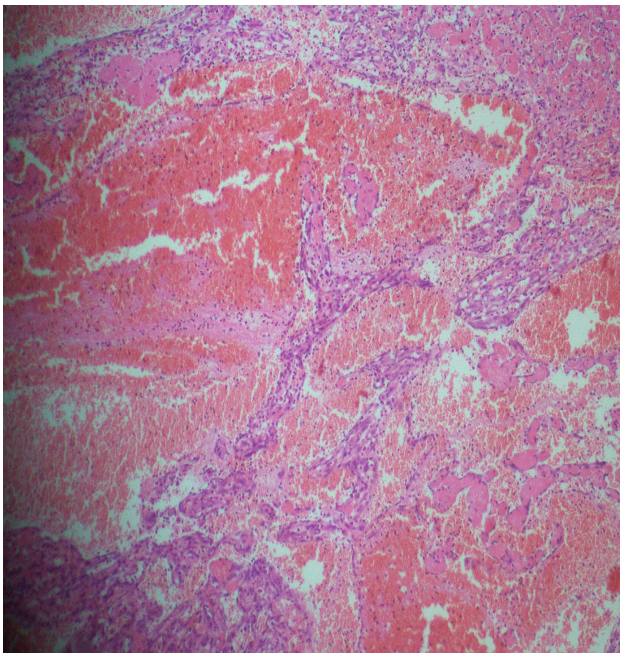

Figure 1: Histopathological outline showing Intravascular Endothelial Papillary Hyperplasia (Masson's Hemangioma).

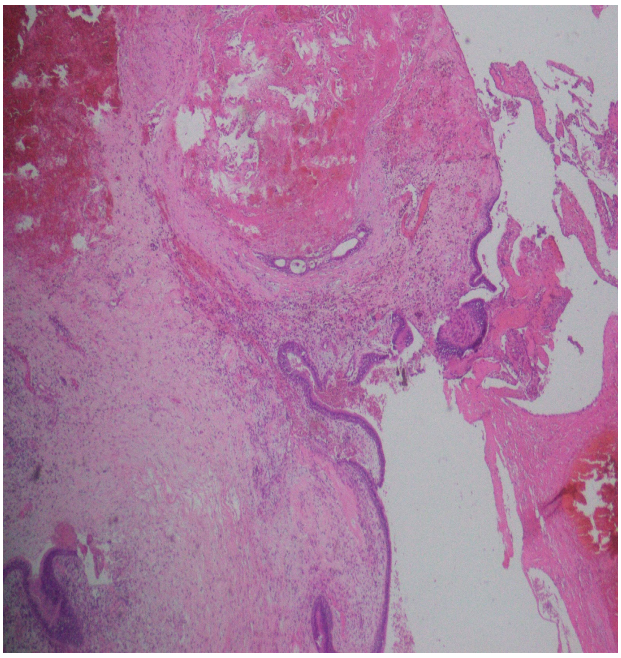

Figure 2: H & E slide showing Intravascular Endothelial Papillary Hyperplasia (Masson's Hemangioma).

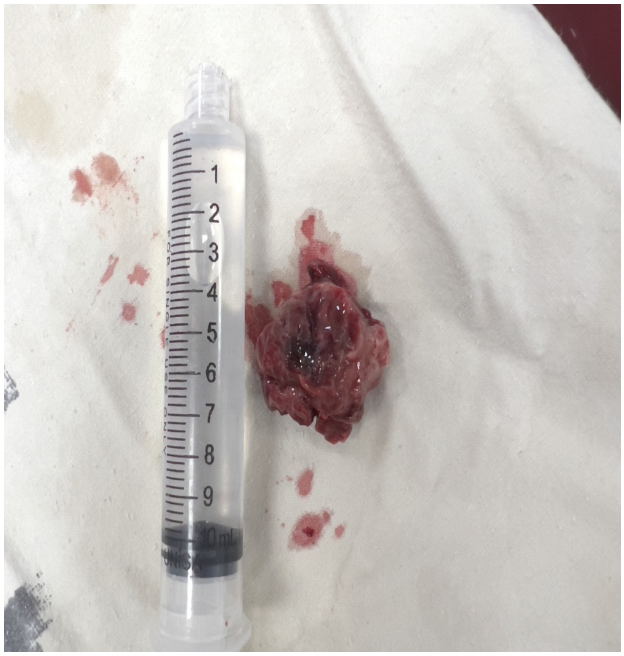

Figure 3: Gross Specimen of Masson Hemangioma of Excision.

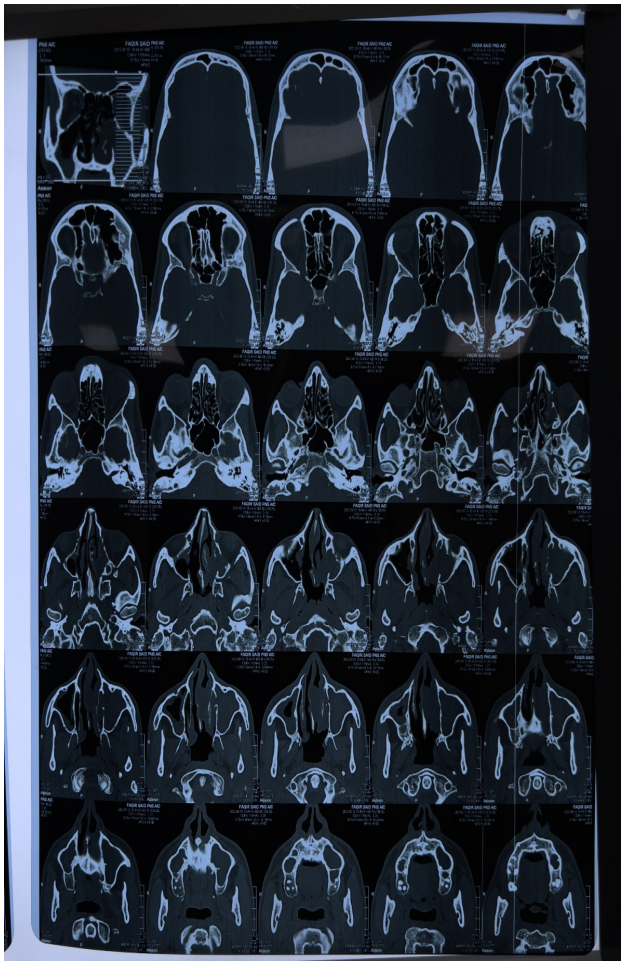

Figure 4: CT Nose and Paranasal Sinuses. showing left Antro -Choanal Polyp

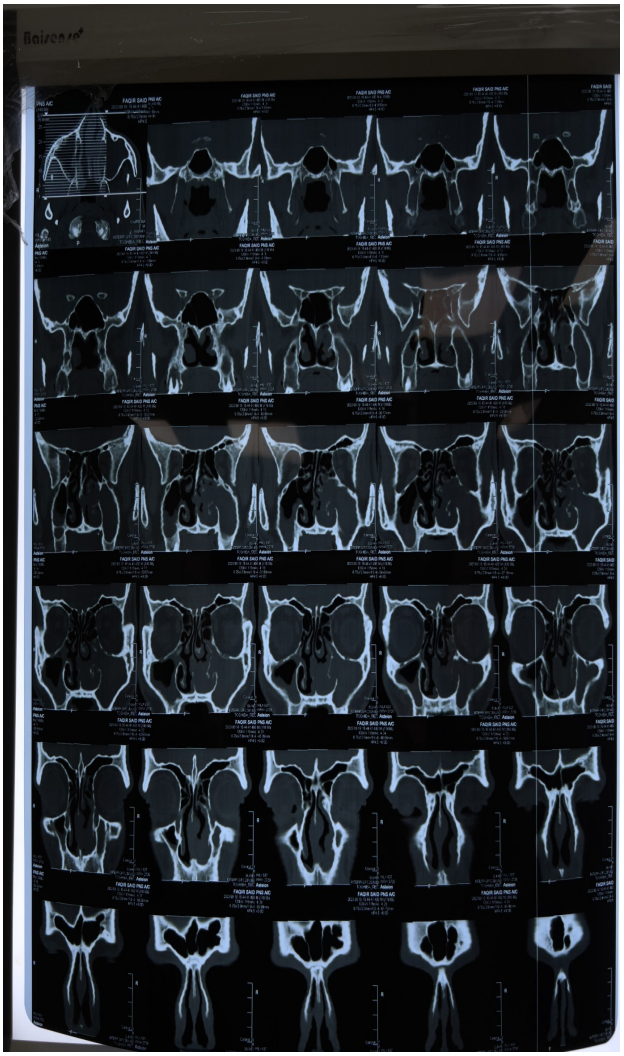

Figure 5: CT Nose and Paranasal Sinuses showing left Antro -Choanal Polyp.

identified as "Vagetant intravascular hemangioendothelioma."[7].

A 22-year-old male with comparable complaints revealed a 10-year history of the synovial hemangioma of the left knee that was identified and treated (arthroscopically). Over the left knee, there was no history of injury or illness. The left knee exhibited normal mobility except for a terminal reduction in range of motion. An intra-synovial low-flow vascular abnormality within the synovium's material was shown by the left knee's MRI. The patient had a synovectomy for the hemangiomatous lesion in toto, and during the eight-month follow-up period, there was no recurrence. The diagnosis of intravascular papillary endothelial hyperplasia/MH was validated by histopathology [8].

An unusual benign vascular lesion called intravascular papillary endothelial hyperplasia is typified by an endothelial cell proliferation that occurs reactively. Due to its rarity, the finger lesion frequently poses diagnostic complications for surgeons. To help identify this rare disease, we present a case of intravascular papillary endothelial hyperplasia [9].

Intravascular papillary endothelial hyperplasia (IPEH), another name for Masson's tumor, is a rare and benign vascular illness characterized by a reactive hyperplasia of intravascular endothelial cells. The head, neck, and upper extremities are the soft tissues where this tumor is most frequently detected. We provide an uncommon instance of IPEH on the vulva. A painful and itchy left vulvar tumor was the presenting symptom for a mid-thirties Hispanic woman. A pedunculated lump was visible on the left labia majora during physical examination. After a pathologic evaluation, the lesion was found to be IPEH and surgically removed. This is an uncommon instance of IPEH on the vulva. In spite of this rarity, IPEH might be managed with a straightforward local excision [10].

In our case the patient was presented with a recurrence of the same mass despite 5 times previous excision, it is important to consider Masson's Hemangioma as a cause of recurrent sinonasal masses (though recurrence is rare with proper resection) for which histopathological diagnosis should be obtained in first instances to avoid aggressive operative measures and a proper surgical excision should be planned to avoid recurrence. CT scan and MRI cannot distinguish between benign and malignant causes; therefore, a histopathological diagnosis should be obtained, and differentiation between Angiosarcoma and hemangioma should be sought out.

CONCLUSION

Recurrent sino-nasal masses may be benign or malignant. Proper surgical resection and histological diagnosis should be made, and the patient should be followed for future recurrence. Proper attention by ENT and head and neck surgeons should be given to identify lesions correctly.

REFERENCES

1. El Husseiny, M., Benhaiem, N., Vayssairat, M., & Allaire, E. (2011). Masson's vegetant intravascular hemangioendothelioma in an external jugular vein aneurysm with recurrent thrombosis. Journal of Vascular Surgery, 53(6), 1723-1725. https://doi.org/10.1016/j.jvs.2011.01.059

2. Crocker, M., DeSouza, R., Epaliyanage, P., Bodi, I., Deasy, N., & Selway, R. (2007). Masson's tumour in the right parietal lobe after stereotactic radiosurgery for cerebellar AVM: Case report and review. Clinical Neurology and Neurosurgery, 109(9), 811-815. https://doi.org/10.1016/j.clineuro.2007.07.005

3. Koktekir BE, Basham R, Vagefi R, Kersten RC. Masson tumor in the eyelid. J Craniofac Surg. 2014 Jul;25(4):1529-30. doi: 10.1097/SCS.0000000000000570. PMID: 24914750.

4. Pauly, M., Sruthi, R., Subramanian, K., & Giridhar, A.

(2022). Masson's tumor of the ocular surface – A rare clinical entity. Oman Journal of Ophthalmology, 15(3), 370-372. https://doi.org/10.4103/ojo.ojo_162_21

5. Behera, B. R., Panda, R. N., Mishra, S., & Dhir, M. K. (2017). Masson Hemangioma—An Unusual Cause of Thoracic Compressive Myelopathy. World Neurosurgery, 98, 876.e9-876.e13. https://doi.org/10.1016/j.wneu.2016.11.099
6. Voruz, F., Arnoux, G., Serex, A., & Landis, B. N. (2022). Intravascular papillary endothelial hyperplasia (Masson's tumor) of maxillary sinus. Brazilian Journal of Otorhinolaryngology, 88(1), 141-145. https://doi.org/10.1016/j.bjorl.2020.11.007
7. Malik A, Mahapatra Q, Sahai K, Mani N. Intravascular papillary endothelial hyperplasia: An unusual histopathological entity. Indian Dermatology Online Journal. 2015;6(4):277. doi:10.4103/2229-5178.160269
8. Ranjan R, Kumar R, Jeyaraman M, Batra A, Kumar A, Agarwal G. Masson's Hemangioma of knee: A rare case report. JOURNAL OF ORTHOPAEDIC CASE REPORTS. 2021 Aug 10;11(9). doi:10.13107/jocr.2021.v11.i08.2376
9. Sung K-Y, Lee S, Jeong Y, Lee S-Y. Intravascular papillary endothelial hyperplasia of the finger: A case of masson's tumor. Case Reports in Plastic Surgery and Hand Surgery. 2021 Jan 1;8(1):23–6. doi:10.1080/23320885.2021.1884560
10. Nwokolo V, Veeramachaneni R, Rivas SD. Vulvar intravascular papillary endothelial hyperplasia or Masson's tumor: A case report. Case Reports in Women's Health. 2020 Oct;28. doi:10.1016/j.crwh.2020.e00250