Nasal hemangioma in pregnancy: A rare clinical entity with a treatment dilemma!
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Abstract:
Nasal lobular capillary hemangiomas are rare [1] and benign tumors of paranasal sinuses. The exact etiopathogenesis is unknown, but are commonly seen during pregnancy, in patients on oral contraceptive pills or patients with a history of trauma. Their presentation during late pregnancy with symptoms of nasal blockade and epistaxis present a dilemma to treating physicians. Limitation in use of imaging modalities like CT scan, make diagnosis difficult with excision and histopathological confirmation crucial in management of this condition.

Key words: Epistaxis; Hemangioma; lobular capillary; Polyp; Pregnancy

Introduction
The nasal Lobular Capillary hemangioma of pregnancy is not an uncommon but an important cause of epistaxis. In a gravid patient with a rapidly growing intranasal lesion, lobular capillary hemangioma should be considered as a differential diagnosis [1]. Due to the rapidity of growth, presentation with epistaxis possibly fatal in pregnancy; histopathological confirmation becomes crucial.

Case report
We present two patients that came to our outpatient department with similar clinical presentations.

The first was a 25 year old female patient in her second trimester of pregnancy (27 weeks gestation) was referred to our outpatient department with complaints of right nasal mass (figure 1) causing nasal blockade and intermittent nasal bleeding with blood stained nasal discharge since 2 months. Nasal mass progressively increased in size until it was seen to be protruding outside the nostril.
There was no history of injury or digital trauma to the nose. Local examination revealed a reddish brown/blackish mass protruding from the right anterior nare approx 1x1cm almost reaching the upper lip and completely occluding the nasal cavity. The mass was soft to firm in consistency, non-pulsatile, non-tender, ulcerated and easily bled on manipulation. Septum showed significant deviation to the left side. Posterior choana and nasopharynx were normal. There was no cervical lymphadenopathy and the rest of the head and neck examination was unremarkable.

Our second patient presented in her third trimester of pregnancy (30 weeks gestation) with similar clinical symptoms and features of a mass in the right nostril (figure 2).

As both patients were in their late 2nd and early 3rd trimester, radiological investigations such as CT scan, X-ray or embolisation were deferred. Routine blood investigations were done revealing low haemoglobin in both patients (Hb below 9mg/dl). Since both cases gave a history of recurrent intermittent epistaxis, a decision was made to perform surgical excision under local anaesthesia in the recommended dosages. Both cases showed the mass arising from the nasal septal mucosa, 1cm margin of which was dissected off along with the mass and the base cauterized. Haemostasis was achieved with cauterezation and an anterior nasal packing was done which was removed after 24 hrs. Both masses were sent for histopathological study (figure 3) and diagnosis of Lobular capillary hemangioma was confirmed. The patient was discharged with oral antibiotics and a close follow up was maintained for a period of 3 months. Postoperative period was unremarkable with no evidence of septal perforation, synechia or recurrence.

Discussion

Hemangiomas are vascular neoplasms that are morphologically classified into capillary, cavernous, arteriovenous and epithelioid type. Lobular capillary hemangioma (LCH), which has previously been termed pyogenic granuloma, is a benign vascular tumor. Although it has been reported in all age groups, it is commoner in the third decade of life [2, 3]. The gingiva, lips, tongue, and buccal mucosa are the most common sites of mucosal LCH and it rarely involves nasal cavity, whereby 80% arise from anterior nasal septum (Little’s area or Kisselbach’s plexus), and 15% from lateral wall (vestibule, tip of turbinates). Other sites include maxillary sinus and roof of nasal cavity [4, 5].

The etiology of LCH remains unknown but trauma and hormonal changes, such as those that occur in pregnancy, are thought to be major etiologic factors. The higher incidence in gravid patients, women using oral contraceptives and post menopausal women indicates a strong hormonal correlation, mainly rise in the levels of estrogen and progesterone. Micro-trauma from nasal packing and intubation can be a predisposing factor [5].

The prevalence rate of capillary hemangioma varies from 0.5% to 5% in pregnant women [6]. Typically, it presents in multiparous women in the last two trimesters of pregnancy. The classic symptoms are rapidly growing intranasal tumour, epistaxis and nasal congestion. Pain is not characteristic of the lesion. It may ulcerate or be coated with necrotic tissues, making it difficult to distinguish from inverted papilloma, carcinoma or metastatic malignancies [5]. The management of a pregnant woman with such a lesion may be complex, and depends on the severity of symptoms and the status of the pregnancy. Differential diagnosis of intranasal foreign body, nasal polyp, sarcoidosis, Wegener’s granulomatosis, hemangiopericytoma, hemangiosarcoma, Kaposi’s sarcoma and lymphoma should also be considered by taking a detailed history [1]. Imaging of lobular nasal capillary hemangioma is usually by contrast enhanced CT of paranasal sinuses where the scan generally reveals a soft-tissue enhancing mass with or without associated bony destruction [7]. However, such radiological investigations are usually avoided during pregnancy to minimize fetal exposure to radiation.

Surgical intervention is unnecessary if it doesn’t cause serious problems as it may involute spontaneously. However, if there is significant nasal obstruction and epistaxis, and the need to rule out malignancy, surgical excision is preferred [1]. Complete surgical excision, with or without pre-operative embolisation, is the treatment of choice [8]. Endoscopic assistance plays a crucial role for visualization and complete removal of tumor with minimal bleeding, thereby reducing chances of leaving behind a residual tumor. The recurrence of this lesion is uncommon and no malignant transformation has been reported [9].

Conclusion

Lobular capillary hemangioma is a rare neoplasm which should be considered in the differential diagnosis of rapidly enlarging vascular
lesions within the nasal cavity. As radiological investigations such as CT scan, X-ray, etc which form the benchmark for diagnosis of any nasal tumor are either contraindicated or preferably deferred in pregnancy, histopathology becomes a must to confirm the diagnosis. Endoscopic intervention is important in diagnosis of the lesion as it can easily limit the surgical morbidity during excision. Endoscopic assisted total excision of the hemangioma with cautereization of the mucosal base is treatment of choice.

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References