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Case Report

Acquired Smooth Muscle Hamartoma in foot– A case report

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Abstract

Hamartoma in soft tissue is a rare presentation. It is a tumor like growth containing of normal tissue and cells from the region of its growth. This type of mass is most often misdiagnosed with other benign lesions like ganglions, neuromas etc, because of the rarity of hamartomas. A 18 yr old male presented with deformity , pain & swelling in the right foot, Herein, we report a case of hamartoma arising from the dorsum of foot, the lesion was primarily thought to be a ganglion. The histopatological examination concluded the final diagnosis of the mass.

Key Words: hamartoma, benign growth, deformity of toes.

Introduction

A 18 year old young man presented with complains of swelling in the web space of his right foot since two years. He noticed the swelling over the dorsum of his great toe and in the third web space 2 years back for which he had consulted a surgeon. The mass over the great toe was hard in consistency and was excised 1 year back. There was no recurrence of the mass over the great toe. There was no report of histopathology performed. The swelling in the third web space over the dorsal aspect was a gradually increasing in size and causing increase in the web space. Patient had complains of pain over the mass on walking & pain increased in the morning. There was no history suggestive of infective or traumatic pathology.

Clinical findings

He presented with swelling and pain in the third web space of the right foot dorsal aspect. On evaluation, there was increase in the 3rd web space. On physical examination a solitary swelling of 2X1 cm with irregular borders and firm consistency. (fig 1, 2). There was no local rise of temperature. The skin over the swelling was pinchable and mobile in anterio-posterior plane.

X ray of the right foot revealed a soft tissue swelling and no bony abnormality, ultrasonography revealed a "focal well defined solid lesion at the base of the right 3rd toe. MRI suggested the diagnosis of ganglion cyst.

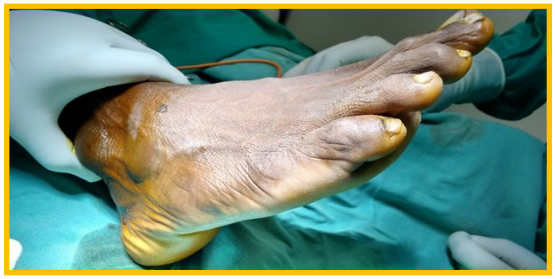

Fig 1.

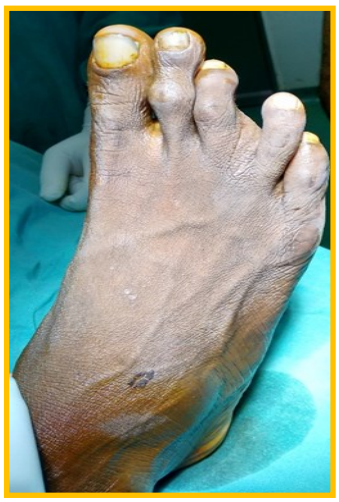

Fig 2.

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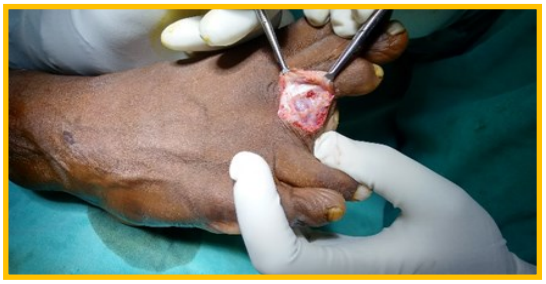


Fig 3.

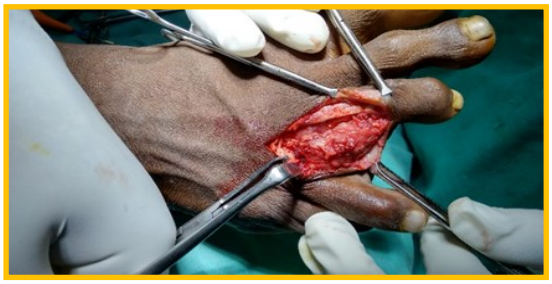


Fig 4.

Treatment

Patient was treated with surgical excision of the mass (fig 3-4) and k wire fixation for correction of the deformity (fig 5-6) was performed under spinal anesthesia. Post – operatively the patient was immobilized in a below knee slab. The excised mass is sent for histopathological examination in our institution.

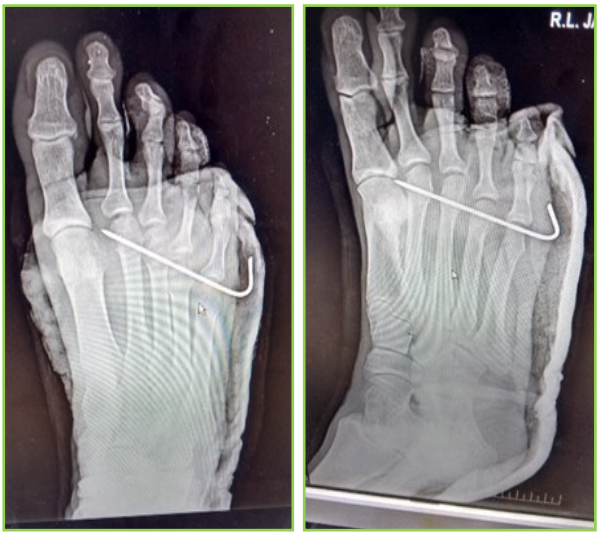
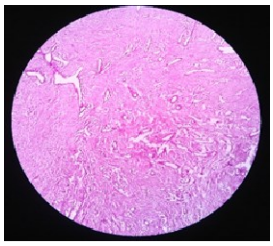


Fig 4. **Fig 5.**

The histopathology revealed the following findings GROSS:- single grey white to grey brown irregular soft tissue mass measuring 3.5X1.5 cm. MICROSCOPY: fibro collagenous tissue with elastic tissue, central fibroid necrosis and mucoid degeneration with chronic granulation tissue. There is proliferation of blood vessels, smooth muscles at areas. There is no granuloma crystals, proliferative of neural elements, calcification. (fig 7-8).



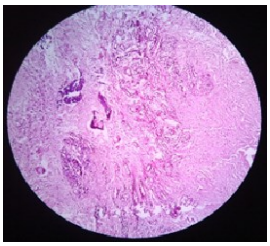


Fig 7. **Fig 8.**

He was advised to continue below knee slab for two weeks. On the follow up after two weeks k wire removal was performed on outpatient basis. He has symptomatically improved on followed up after third week. Clinically there is significant reduction in the widened web space (fig-9), relief of pain on walking is noted.

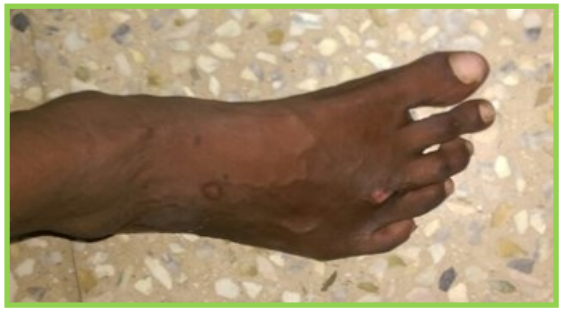


Fig 9.

Conclusion

A hamartoma is a benign (noncancerous) tumor like malformation made up of an abnormal mixture of cells and tissues found in areas of the body where growth occurs. It is considered a developmental error and can occur at any site.

Hamartomas may not cause any problems and are usually identified incidentally. Uncomplicated hamartomas have no tendency to grow, except as determined by the normal growth controls of the body. However, this does not mean that hamartomas are harmless. However, cases of neoplastic evolution have occurred with these lesions. Unusual cutaneous locations are seen in the upper extremities, face, and the mammary regions. Scrotal and eyelid involvement were also recently reported. Smooth muscle hamartomas present more frequently in male patients.[1,2]

The clinical lesions usually become less prominent with time and a review of the approximately 50 cases reported in the literature showed that there is no known associated systemic involvement or malignant transformation.[3] There appears to be a rare acquired type of smooth muscle proliferation, which has been described under the title acquired SMH (ASMH). The color of the lesions varies from pink to flesh tones to brown, which was seen in our case. Clinical diagnosis of SMH is difficult, because of the lack of specific diagnostic criteria. The clinical differential diagnosis of a smooth-muscle hamartoma includes congenital nevocellular nevus, Becker nevus, café-au-lait macule, epidermal nevus, leiomyoma, connective-tissue nevus, and solitary mastocytoma. Histopathologic evaluation is necessary for definitive diagnosis of Acquired smooth-muscle hamartoma.[4] Surgical excision is the treatment of choice in a symptomatic case of hamartoma and pathological diagnosis play an important role.

References

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