

Isolated hemangioma of the foot

Abstract

Hemangiomas are soft tissues tumors that rarely affect the feet and majority are asymptomatic. If activities of daily living is affected, treatment is indicated. The diagnosis is usually made through histopathology. We are presenting a case report of a female patient who presented with a painful and sensitive plantar mass that was treated with an excision.

Volume 16 Issue 1 - 2024

Makgabo Tladi

Louis Pasture, Jakaranda and Cure Midkin hospitals, South Africa

Correspondence: Makgabo Tladi, Louis Pasture, Jakaranda And Cure Midkin Hospitals, suite 840 louis pasture private hospital, South Africa, Email mjtladi.ortho@gmail.com

Received: December 25, 2023 | **Published:** January 08, 2024

Introduction

Hemangiomas are vascular, benign tumors that are usually caused by vasoformative tissue proliferation.¹ They are commonly found in the neck and head. Any vascular body tissue can be affected. Some studies have reported more prevalence in females while others have shown no gender difference.^{2,3} They constitute about 7% to 10% of all soft tissue benign tumors.^{4,5} Foot and ankle involvement is reported to be rare.^{3,6} Compartment syndrome of the foot has been reported in a child.⁷ Malignant transformation is reported to be rare.⁸

Case report

A 42 year old female patient presented with atraumatic right foot painful plantar mass for 12 months period. The mass made her to have difficulties with shoe wear. On examination, the mass (Figure 1) was tender and sensitive to touch. The x-rays of the foot were normal. The sonar showed a well circumscribed mass. She consented for excision of the mass. Intraoperative the lesion had reddish colour with blood vessels within (Figure 2). Histology showed a vascular proliferation in the dermis that was lined by flattened endothelium. Haemosiderin pigment was identified in the surrounding stroma. The features were consistent with a diagnosis of haemangioma.



Figure 1 Medial plantar mass.



Figure 2 Hemangioma (blue arrow) with blood vessels within (orange arrows).

Discussion

Hemangiomas are frequently encountered in childhood and early adulthood. In the absence of histopathological evaluation, clinical diagnosis is often difficult to make. Majority are asymptomatic and in those that are symptomatic, about 98% present with a mass and 60% will have pain that can be made worse by activities.^{3,5} The condition can mimic various conditions. A case of chronic ankle pain presenting as a peroneal tenosynovitis has been described.⁶

Radiological investigations are often nonspecific. The x rays can either be normal or those with small lesions that extend into adjacent bones can appear as a rounded or liner areas of hyperlucency. Fewer cases can present with phleboliths.⁹ On MRI T1 images, the lesion can appear as low to intermediate signal intensity containing variable amounts of high signal intensity fat. With T2 images, the lesion can show high signal intensity and a striated or septate configuration because of multiple vascular channels.⁵

Histological appearance of a haemangioma consists of a well circumscribed mass having proliferation of capillaries located at the matrix. The thin vessels are arranged in lobules. Various classification can be used.²

Most of these tumours do not require interventions. However, others may need interventions because of their size, pain control or near structures functional involvement. Conservative management include steroid, or sclerotherapy. Surgical management usually involves cauterization with silver nitrate, curettage or excision.^{2,3} Preoperative embolization can be done if the feeding vessels are larger. Recurrence rate is reported to be about 18% to 60% if the mass is partially excised or feeding vessels are not ligated.^{5,10}

Conclusion

Hemangiomas of the foot and ankle are rare. The condition can mimic other conditions. Painful lesions may require medical interventions. Surgically, the lesion needs to be completely resected to prevent recurrence.

Acknowledgments

None.

Conflicts of interest

The authors declare that there are no conflicts of interest.

Consent

The consent to publish the case report was obtained from the patient.

References

1. Cione JA, Cozzarelli J. Capillary hemangioma of the foot. *J Am Podiatr Med Assoc.* 2002;92(3):155–157.
2. Ahuja T, Jaggi N, Kalra A, et al. Hemangioma: review of literature. *J Contemp Dent Pract.* 2013;14(5):1000–1007.
3. Boedijono DR, Luthfi APWY, Erlina. Intramuscular haemangioma of abductor hallucis muscle: A rare case report. *Int J Surg Case Rep.* 2020;77:682–685.
4. Griffin N, Khan N, Thomas JM, et al. The radiological manifestations of intramuscular haemangiomas in adults: Magnetic resonance imaging, computed tomography and ultrasound appearances. *Skeletal Radiol.* 2007;36(11):1051–1059.
5. Wierzbicki JM, Henderson JH, Scarborough MT, et al. Intramuscular hemangiomas. *Sports Health.* 2013;5(5):448–454.
6. Urgüden M, Ozdemir H, Duygulu E, et al. Cavernous hemangioma behaving like peroneal tenosynovitis. *Foot Ankle Int.* 2000;21(10):856–859.
7. Downey-Carmona FJ, González-Herranz P, De La Fuente-González C, et al. Acute compartment syndrome of the foot caused by a hemangioma. *J Foot and Ankle Surg.* 2006;45(1):52–55.
8. Wisniewski SJ, Newcomer K, Stanson AW. Intramuscular hemangioma of the foot: A diagnostic dilemma. *Med Sci Sports Exerc.* 2005;37(10):1655–1657.
9. Llauger J, Palmer J, Monill JM, et al. MR imaging of benign soft-tissue masses of the foot and ankle. *Radiographics.* 1998;18(6):1481–1498.
10. Dalei TR, Loya VK. Tendon Sheath Hemangioma. *J Hand Microsurg.* 2019;11(S 01):S22–S25.