

Soft Tissue Angiomatosis of Index Finger

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Case Report

Abstract: Soft-tissue angiomatosis is counter as a rare condition characterized by diffuse proliferation of benign vascular structures, together with mature adipose tissue. Many of the time it presents in childhood or adolescence of the patient. Mainly surgical treatment is done and it shows local recurrence in common. We present and report a rare case of large soft-tissue angiomatosis which is located in the right index finger of a 36-year-old man, which showed extensive infiltration of soft tissue, and embracement of vascular and neural bundles of right index finger. The features of the lesion made complete surgical excision impossible and best treatment considered for this was amputation of the index finger.

Keywords: Index finger, Soft tissue, Angiomatosis.

Introduction

Angiomatosis is defined as diffuse infiltration of bone or soft tissue by hemangiomas or lymphangiomas lesions. Extensive soft tissue and visceral involvement by angiomatosis carries a poorer prognosis. The main differential diagnoses include infiltrating lipoma, myxolipoma, angiomyxolipoma, angiolipoma, intramuscular angioma, liposarcoma and low-grade myxofibrosarcoma[1]. Treatment is surgical, with local recurrence being common. We report a rare case of angiomatosis of soft tissue involving right index finger of 36 year old man.

Case Report

A 36 year old man, tailor by occupation came with a painful swelling in his right index finger since one year. On examination patient had diffuse painful swelling of right index finger, pigmented, firm in consistency (fig.1). Patient was hospitalized outside earlier twice and had undergone incisional biopsy which reported it as? Angiomatosis? Fibroma. X-ray revealed diffuse soft tissue swelling around the phalanges of right index finger (fig.2). MRI of right hand revealed diffuse swelling around the phalanges with no destruction of underlying bone.



Figure 1: Soft tissue swelling of Right index finger



Figure 2: X-ray shows non-involvement of underlying bone

The HIV test of the patient was negative. In view of non-functioning status of the patient's index finger and constant excruciating pain suffered by the patient, a decision of excisional biopsy/amputation of the swelling (affected finger) was made. Intraoperatively a soft tissue surrounding the proximal, middle and distal phalanges of the right index finger was seen. The right index finger was disarticulated at the level of metacarpophalangeal joint and the wound was primarily sutured. The histopathology revealed features suggestive of soft tissue angiomatosis (fig.3). Postoperatively patient followed for 3 years with no local recurrence.

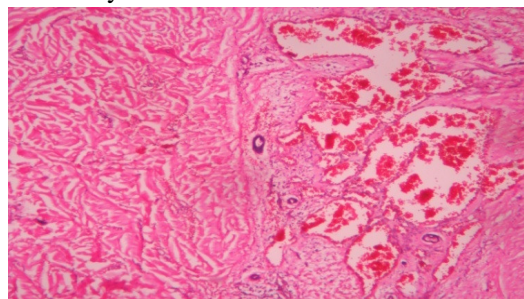


Figure 3: Histopathological picture of amputated Right index finger showing soft tissue angiomatosis

Discussion

Angiomatosis is a rare benign complex vascular malformation seen mostly during the childhood and adolescence. It may involve subcutaneous tissue, skeletal muscle, skin and occasionally bone. The lesions are non-encapsulated with poorly defined infiltrative borders. Generally the lesions in angiomatosis have no malignant potential except in Mafucci syndrome [2]. Histology usually shows a haphazard proliferation of vessels of varying sizes, particularly large veins, also a mixture of small and medium-sized vessels, fat, connective tissue, and lymphatics. The veins have irregular, thick walls that have occasional attenuations and herniations. However, the presence of clusters of capillary vessels residing within or just adjacent to the vein walls is notable feature. A cluster of capillary-sized vessels infiltrating the soft tissues is uncommon pattern. Both types are typically associated with large amounts of fat, suggesting that these lesions are more generalized mesenchymal proliferations rather than exclusive vascular lesions.

Although benign, the management of this condition and surgical decision making is difficult. In another form, the Bacillary angiomatosis is a vascular, proliferative form of *Bartonella* infection that occurs primarily in immunocompromised persons which responds to erythromycin as observed by KoKo Aung. [3] The treatment of choice in extensive angiomatosis is either radiotherapy or Interferon α as studied by Val-Bernal JF et al. [4] Angiomatosis may involve soft tissue, bone and viscera.

Angiomatosis might show similarities of liposarcoma, particularly if the mass is large, heterogeneous, myxoid and appears later in life [1]. In localized form, complete excision is preferred but there is a risk of local recurrence. Angiomatosis has no tendency to progress or evolve histologically to a more aggressive lesion. On follow up, as observed by Rao VK et al. nearly 90% of patients experienced the local recurrence and approximately 40% encountered more than one local recurrence within a period of 5 years [5]. In our case postoperatively patient followed for 3 yrs with no local recurrence.

References

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