Superficial Acral Fibromyxoma presenting as plantar arch soft tissue mass.

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Abstract

Introduction: Superficial Acral Fibromyxoma(SAF) is a rare mesenchymal neoplasm with a predilection for the digital, tissue of hands and feet. Ii was first described in 2001, more than 100 cases reported predominantly literature. There are limited publications in Foot and Ankle. There were <10 cases of SAF on the plantar heel with n Cases reported on plantar arch. Differential diagnosis included dermatofibroma, Dermatofibrosarcoma protuberans, Superficial angiomyxoma, – Myxoid neurofibroma, Giant Cell Tumor, Sclerosing Peri neuroma, Fibrous Histiocytoma, Fibroma of the Tendon Sheath, Cutaneous Myxoma. Pathology from the tissue showed SAF. Histology shows Spindled, fibroblast-embedded in myxoid matrix, Accentuated Microvasculature, Low Mitotic Activity.
Methods/Results: This case focuses on the presentation, imaging, pathology, treatment and outcomes for a 66 years old female patient who presents with lump for years, with insidious slow enlargement over the past 2 years. The mass was not painful per se but pulled and toggled with sock application. The patient was diagnosed with a rare, soft tissue mass Superficial Acral Fibromyoma. The patient was treated with surgical excision of the soft tissue mass and was non-weight bearing in Unna boot and partial weight bearing in CAM boot 3 weeks post operatively. At 10 weeks follow up, the patient complained of occasional burning sensation with return to casual shoe gear.
Conclusion: Surgical excision of the SAF is recommended but literature reported about 22 % recurrence rate at 20.1 months. Rarely reported in the literature, makes it worthy of acknowledgment.
Level of evidence : case report , 4

Introduction:

The incidence of SAF (SAF) is a rare mesenchymal neoplasm with predilection for the digital, tissue of hands and feet. They usually present as solitary nodule on the toes, or fingers and occasionally in the palm(1).It was first described in 2001, more than 100 cases reported predominantly. There are limited publications in foot and ankle. There were < 10 cases of SAF on the plantar heel with no cases reported on plantar arch. Differential diagnosis include dermatofibroma, dermatofibrosarcoma protuberans, superficial angiomyoxoma, myloid neurofibroma, schlerosing peri neuroma, fibrous histiocytoma, acral fibrokeratoma, fibroma of the tendon sheath, cutaneous myoma (1,2,3,4).The male to female ratio 2:1 and subungual or periungual tissue of the hallux (most common) with frequent distortion . The age ranges from 14-72 years old with mean of 43 years and average presentation is 30 months to 43 years prior to excision (2,3,4).

Methods, materials and results:

The case of 66 years old female who complained of a lump present for years, insidious onset, with slow enlargement over the past 2 years. No pain on lesion per se but frequently pulled and tugged with sock application. Patient also feels the mass when barefoot. On examination it is a punctuated lesion right plantar foot in arch apice just proximal to 3-4 MPJ impression. There is no pigmentation, septate noted from 9 o'clock to 1 o'clock margin otherwise evaginated, locally mobile appendage distally and firm, no transillumination and measuring 2.3 x 2.0 cm. It is dermal without obvious extension to plantar fascia. The mass is mobile rim keratinized from 2 o'clock to 4 o'clock margin. It is not pulsatile. Pathology was obtained and the result came back as superficial acral fibromyoma. Complete surgical excision was performed, and the patient was non-weight bearing for 3 weeks and partial weight bearing in CAM boot for 3 more weeks. Patient was back to regular activity and shoes gear at 10 weeks postop with mild occasional burning sensation from the arch.

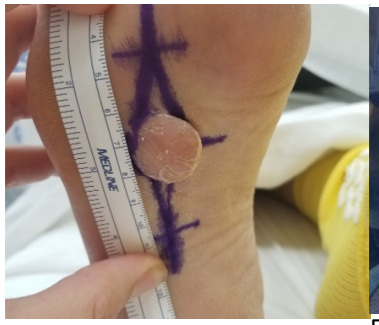

Fig1: preoperative

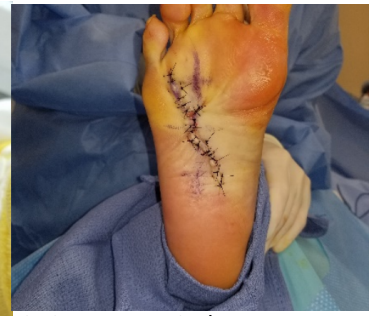

Fig 2: post-surgical

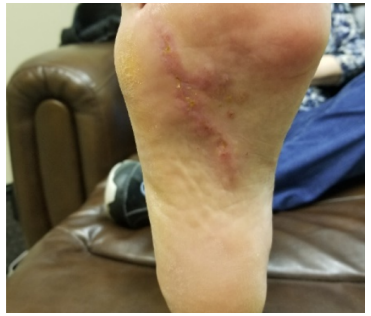

Fig 3: 10 weeks Postop

Discussion:

SAF is usually asymptomatic but could be symptomatic presenting as plantar foot pain or paresthesia and numbness. It is usually dome-shaped, non-encapsulated tumor extending through the dermis. It could be firm, gelatinous or solid. Surgical excision of the SAF may be considered in patients failing conservative treatment. Literature reported about 22% recurrence rate as 20.1 months(1).

Conclusions:

In the setting of foot pain in relation to soft tissue mass, SAF can present as lump or mass which is usually asymptomatic. Radiographs, advanced imaging such as CT, and MRI can help in the diagnosis of difficult cases. Biopsy of the soft tissue mass can help for definitive diagnosis. Rarely reported in the l-iterature, this condition and unsuspecting clinical presentation makes it worthy of acknowledgment.

References:

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