

Glomus tumor of the toe an Exceptional Localization

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Abstract

glomus tumor is an uncommon, predominantly benign, neoplastic lesion that primarily involves a thermoregulatory microvascular apparatus, the glomus body. Although these lesions can occur anywhere in the body, the subungual tissue of the hand represents the most common presentation site. Glomus tumors are not often encountered in the foot. Symptoms traditionally include the classic triad of pain, pressure, and cold sensitivity. This case report describes a variant location for a glomus tumor in the subcuticular tissue adjacent to the medial middle phalanx of the first toe. The lesion was excised surgically.

Key words: glomus tumor; subungual tissue; toe

Introduction

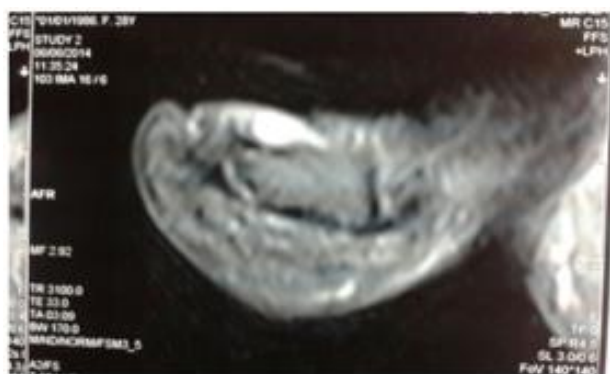
Glomus tumors are rare, benign neoplasms that originate from glomus bodies. While usually occurring in the subungual regions of the fingers, glomus tumors are seldom found in the foot. [1] We describe a reported case of a glomus tumor occurring in the distal phalanx of the right first toe that was initially missed on imaging studies, resulting in delayed diagnosis and surgical treatment. To the best of our knowledge, this represents one of the first few cases of glomus tumor reported in the toes.

Observation

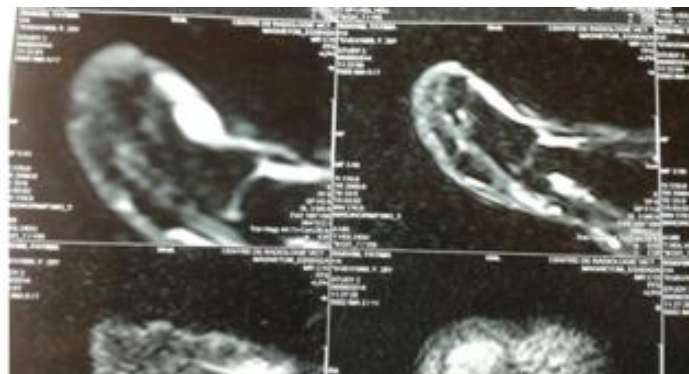
This case report follows a 37-year-old female who presented with pain in the right first toe that started a year ago. On clinical examination, there was

exquisite point tenderness on palpation of the right first toe distal phalanx. The MRI (fig 1.2) reported a $0.15 \times 0.25 \times 0.2$ cm well defined round enhancing high T2-weighted signal focus within the central portion of the germinal matrix in the right first toe subungual region. No bony scalloping or edema was noted in the adjacent distal phalanx

Surgery was performed under local anesthesia with the use of a rubber band tourniquet. The nail was removed to expose the nail bed. The mass within the nail bed at the junction of the sterile and germinal matrix was then excised in an elliptical fashion for histopathological examination. Histopathology results confirmed the diagnosis of glomus tumor 1-year post-surgery, there was no recurrence of pain or discomfort. No nail dystrophy was seen.



1



2

Figures 1,2 : Magnetic resonance imaging scans of patient showing hyperintense signal on T2-weighted images

Discussion

Glomus tumors, first described by Wood in 1812 as “painful subcutaneous tubercles”, are rare benign neoplasms arising from subcutaneous glomus

bodies characterized by pain and temperature sensitivity. [2] Glomus tumors are uncommon and represent around 1.5% of all benign soft-tissue neoplasms in the upper and lower extremities. [3] The highest incidence (75%) of glomus tumors arise in the hands, especially in the subungual areas

and fingertips, although they can be found in almost any site of the body including rare reports in the subungual regions of the toes and the plantar surface of the heel, arch and forefoot. [4]

A glomus tumor is difficult to diagnose clinically. Some patients have endured long-standing pain owing to misdiagnosis [5]. The delay in diagnosis can result from its rarity, because of an atypical presentation, or by mimicking another painful condition. Although bony erosions can be seen on radiographs in subungual tumors, the frequency of that finding has not been high [6]. If bony erosions are present and indicate bony involvement, dissection of the tumor down to the surface of the bone will decrease the chance of recurrence [7]. It was not seen in the present case

MRI can be useful for detecting a cutaneous glomus tumor; however, a targeting examination is mandatory because such lesions are small. Therefore, a high degree of clinical suspicion is needed before using MRI. [8] The tumors will typically appear as well-delineated masses, with a low signal on T1-weighted images and a high signal on T2-weighted images [9] The treatment of a glomus tumor should be surgical, and dramatic pain relief after excision is characteristic. The recurrence of digital glomus tumors after surgical excision has been thought to be rare. [10]

Conclusion

Glomus tumors are rarely found in the foot; Their rare occurrence in these regions reduces diagnostic suspicion for these tumors. glomus tumors should be included in the differential diagnosis of atypical and unexplained localized forefoot pain. If suspected, excisional biopsy can be curative, although patients should be aware that recurrence is possible.

Conflict of interest: No conflicts of interest.

Référence

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