

EXTRADIGITAL GLOMUS TUMOR CAUSING PARA-ACHILLES TENDON PAIN. A CASE REPORT

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A 48-year-old woman with a 15-year history of a painful nodule in the para-Achilles tendon area was evaluated by clinical examination, magnetic resonance imaging and ultrasonography, then treated by simple surgical excision of the nodule. Pathology revealed a glomus tumor, which is extremely rare in the para-Achilles tendon area. This is the first report of a glomus tumor in this location.

Key words : Achilles tendon ; glomus tumor ; soft tissues.

Mots-clés : tendon d'Achille ; tumeur glomique ; tissus mous.

INTRODUCTION

Glomus tumors are rare benign neoplasms arising from neuromyoarterial glomus bodies. Although glomus bodies are distributed throughout the body, most occur in a distal phalanx, often beneath the nail. Unusual locations include the patella, chest wall, bone, stomach, colon, nerve, eyelid, nose, trachea, and possibly mediastinum. They have also occurred in the rectum, cervix, vagina, labia, and mesentery. Most glomus tumors are solitary lesions, and their incidence is quite low. The Mayo Clinic reported that they accounted for approximately 1.6% of 500 consecutive soft tissue tumors. Glomus tumors can occur during adult life, between 20 and 40 years of age. They seem to occur with equal frequency in men and women. This paper describes a glomus tumor in a very unusual location.

CASE REPORT

A 48-year-old woman was referred with a 15-year history of para-Achilles tendon pain from a lateral Achilles mass. The medical and family history was noncontributory. The mass was painful on weightbearing and direct pressure, and had gradually increased over the years. The soft, elastic, painful mass observed in the para-Achilles tendon area was approximately 1 × 2 cm. There was no temperature sensitivity. Radiographs did not show calcification or bone abnormalities (fig. 1), but

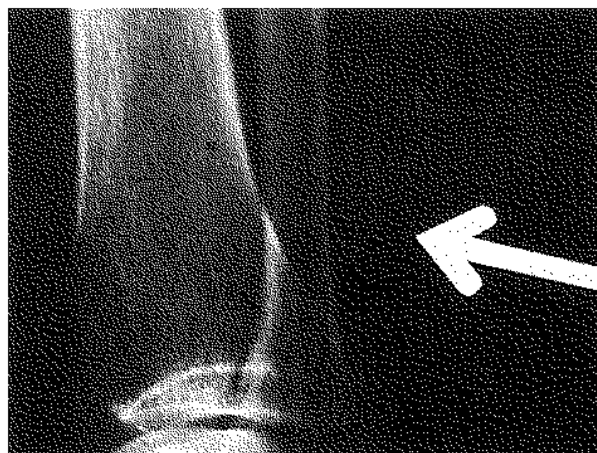


Fig. 1. — Plain radiograph of the Achilles tendon.

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Fig. 2. — Doppler ultrasonogram demonstrating a 1.5 × 2 cm lesion close to the right peroneal muscle.



Fig. 3. — T2-weighted sagittal MRI scan showing the glomus tumor (arrow) in the para-Achilles tendon area.

ultrasonography of the painful area revealed a well-circumscribed solid and cystic lesion (fig. 2). Magnetic resonance imaging (MRI) showed mainly a low-signal mass on T1-weighted images and a high-signal mass on T2-weighted images (fig. 3). The tumor was enhanced by injection of gadolinium. Excision of the tumor along the lateral Achilles tendon was performed under general anesthesia. Histologically, the tumor cells displayed typical features of a glomus tumor. It was well-demarcated

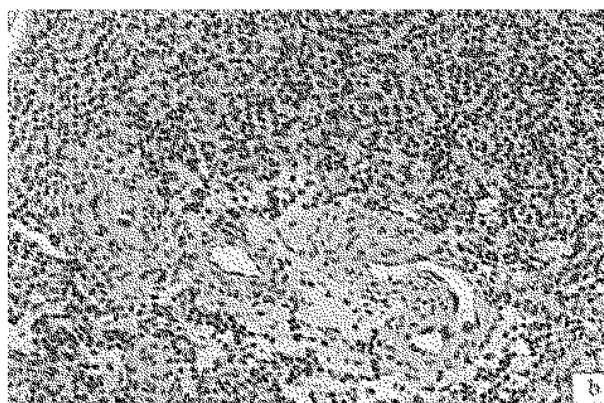


Fig. 4 (a). — The tumor was well demarcated and was composed of dilated capillary vessels and solid sheets made of round-to-oval cells with distinct cell borders.

Fig. 4 (b). — Numerous round glomus cells filling the spaces between capillaries. Mitoses were rare, and necrosis and cellular atypia were not observed.

and was composed of solid sheets made of round to oval cells with distinct cell borders. Mitoses were rare, and necrosis and cellular atypia were not observed. Capillary-sized vessels were prominent in the tumor. Immunohistochemically, the tumor was focally positive for smooth-muscle actin, a common finding in glomus tumors (fig. 4). Close follow-up monitoring of the involved area revealed no evidence of recurrence 18 months postoperatively.

DISCUSSION

Glomus tumors present with a classic triad of symptoms: the first one gives paroxysms of pain

radiating away from the lesion ; this is the most common complaint. The second one is point tenderness, and the last one is hypersensitivity to temperature, especially to cold. In addition, reddish purple discoloration is a characteristic finding for lesions located in superficial subcutaneous tissues. In rare cases, glomus tumors may be associated with osteopenia, bone atrophy, and hypoplasia. In our case, gait pain on contraction of the Achilles tendon and chronic point tenderness allowed a clinical diagnosis to be made. Ultrasonography and MRI helped locate the lesion and showed its relationship to adjacent structures. Ultrasonography is often useful to making the diagnosis. In the soft tissues around the Achilles tendon, we were able to identify a well-circumscribed soft and cystic lesion. MRI has been used successfully to diagnose glomus tumors. A glomus tumor appears as a dark, well-delineated mass (low signal) on T1- weighted images and as a bright, well-delineated mass (high signal) on T2- weighted images. MRI findings are not always specific for glomus tumors, and may be similar for well-circumscribed solid neoplasms. Treatment for glomus tumors is typically excision, which is usually curative with ensuing pain resolution. The biological behavior of the tumor is usually benign, and recurrences are unusual. A glomus tumor should be considered in the differential diagnosis of any painful, benign mass in a limb. An early and accurate diagnosis will prevent unnecessary procedures, and final proof can be provided by histological findings.

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SAMENVATTING

Y. NAKAMURA, T. NOMURA, M. OOKUBO, T. ADATI, D. HARADA. Extra-digitale glomustumor als oorzaak van para-achillodynie : een gevalstudie.

De auteurs halen het geval aan van een 48 jarige patiënte die sinds 15 jaar last had van een pijnlijke nodulus vlakbij de achillespees. Na klinisch, echografisch en kernspintomografisch onderzoek werd de nodulus heelkundig verwijderd. Histopathologisch bleek het te gaan om een glomustumor. Glomustumoren zijn relatief zeldzaam buiten de vingers. Volgens de auteurs werd nooit eerder een glomustumor gevonden in het gebied van de achillespees.

RÉSUMÉ

Y. NAKAMURA, T. NOMURA, M. OOKUBO, T. ADATI, D. HARADA. Tumeur glomique extra-digitale responsable de douleurs para-achilléennes : présentation d'un cas.

Les auteurs rapportent le cas d'une patiente de 48 ans qui présentait depuis 15 ans un nodule douloureux dans

la région para-achilléenne. Après mise au point par examen clinique, échographie et résonance magnétique nucléaire, elle a été traitée par excision chirurgicale du nodule. Son analyse a montré qu'il s'agissait d'une tumeur glomique, extrêmement rare dans la région para-achilléenne. Ce cas semble être le premier rapporté dans cette localisation.