

Case Report of Leiomyoma of the Achilles Tendon in a 62 year old Male.



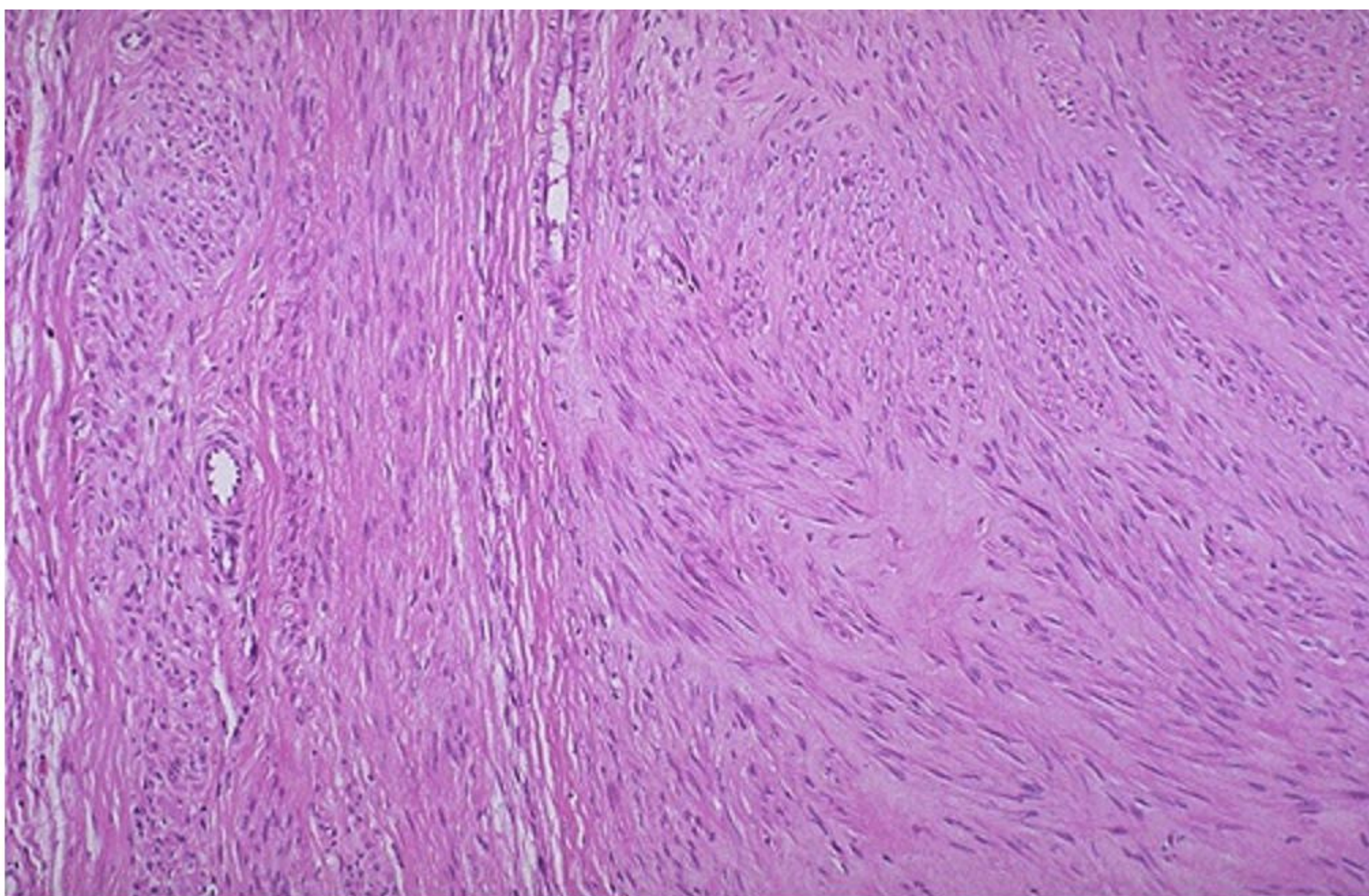
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Background

Leiomyomas represent approximately the 4% of benign soft tissue neoplasms (Matos et al.), with epidemiological studies characterizing them as benign soft tissue neoplasms originating from smooth muscle tissue which affect the lower extremities at higher rates than upper extremities and with prevalence in females over males(Bernad et al.). Though leiomyomas are categorized dependent on the depth in which they appear, angioleiomyomas appear about 0.2%of the reported soft tissue neoplasm in lower extremity literature (Bodapati VS et al) and represent painful slow growing lesions. Though the pathophysiology of the growth of the spindle cell like masses is not completely understood, its prevalence in the lower extremity has lead to a greater body of characterization of the forefoot and hindfoot (Zaher A et al), no reports of leiomyomas of the ankle structures appear in the literature.

Case

Patient first presented early October 2023 to clinic for complaint of 8 year history of “lump” to the right posterior foot, which has slowly grown in size, and becomes irritated with dress shoes. Patient started experiencing shooting electric sensation to the area, especially at night. He had been seen 3 years prior by a different provider but did not follow up with X-rays prescribed then. Past medical history includes BPH, hyperlipidemia, hearing loss. On examination the mass was prominent to the posterior insertion of the achilles, movable, well defined, with unclear continuity with tendon. No pain or electric pain reproducible on examination.



Here is the microscopic appearance of a benign leiomyoma. **Normal myometrium** is at the left, and the neoplasm is well-differentiated so that the **leiomyoma** at the right hardly appears different. Bundles of smooth muscle are interlacing in the tumor mass.

Results

Clinical course under our care included imaging findings and discussion for resection and pathology. Imaging findings including x-rays - heterogenous luscency, with questionable involvement of tendon; MRI findings “superifical to the left achilles tendon is a 1.3x0.7x1.1cm mass which is seen to directly abut the tendon sheath of the achilles however there is no abnormal signal within the tendon itself. “ The mass was resected through a linear approach, with minimal dissection of the subcutaneous tissue with no infiltration of the tendon itself. Overall Patient was followed weekly for the first two weeks, at which time stitches removed, area was noted to be healed well. No further symptoms of electricity at night. He then was followed for two more appointments at month 6 weeks, and 10 weeks post surgery, without any instances of electrical pain, or recurrence of the mass after 2 years.

Conclusion

Through a search of NIH PUBmed data base with search phrases such as “ankle soft tissue mass” "ankle neoplasm", "leiomyoma of the ankle", "achilles soft tissue mass", "leiomyoma of achilles", yielded zero results. Given the rarity of the type of tumor, the literature found on leiomyomas mostly focuses on the plantar and dorsal foot with no clear evidence of tendon preference. This case reflects the importance of pathological screening of all foot and ankle soft tissue masses, as it is possible leiomyomas are more common than previously thought given possible underreporting in the literature.

References

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