Leiomyoma of the hand
- case report -

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INTRODUCTION

Leiomyoma is a benign, slowly growing tumor that originate from smooth muscle. It is commonly found in the uterus of mid-aged women. Leiomyoma of extremity is relatively uncommon, and most of cases are occurred in the lower extremities. Since, Butler et al. reported leiomyoma of the hand in 1960, several papers reported that. We present leiomyoma of the hand that occurred in hypothenar area.

CASE

A 24 year-old, right hand dominant woman presented with a 1 year history of a slowing growing, painful mass on the volar aspect of hypothenar area. She also complained numbness at the radial aspect of little finger. On physical examination, a 3cm sized, tender, and rubber mass was present on the volar surface of the fifth metacarpal bone. Plain radiographs revealed increased soft tissue density at hypothenar volar aspect and no bony abnormality. MRI demonstrated 2.4*1.8*2.9 cm sized lobulated mass at plamar aspect of 5th metacarpal shaft level. This soft tissue tumor had a high signal intensity on the T2 weighted image and showed a similar signal intensity to the surrounding muscle on the T1 weighted image. Also it was strongly enhanced by contrast media. Under general anesthesia, a longitudinal incision was made over the mass. The mass was well capsulated, but involved the tendinous portion of interosseous muscle. Otherwise, it is easily dissected from the surrounding tissue. After surgery, splint was applied for 2 weeks for wound healing and pain relief. RESULTS Macroscopically, the mass was firm, encapsulated, and the length of longitudinal axis was 2.2 cm. Microscopic examination revealed intertwining bundles of the smooth-muscle cells without mitotic activity. Immunohistochemical staining was positive for actin and negative for S-100. Histopathological examination confirmed the clinical diagnosis of leiomyoma. From 2 weeks after the operation, the patient was able to do all the daily activity, and there was no pain from POD 2 months.

CONCLUSION

Leiomyomas are rare benign soft tissue tumors presenting with non-specific symptoms. Preoperative MR imaging is crucial to demonstrate the extent of the mass and the relationship between the neurovascular structures as well as the bones. Immunohistochemical staining with demin and actin provide definite diagnosis.