Lipoma of the Middle Finger: A Case Report

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Sir,

Lipomas are the most common type of benign mesenchymal tumors.1 They usually present as asymptomatic soft-tissue masses and sometimes result in symptoms such as pain and functional impairment when they compress surrounding structures, depending on the size and location.2 Although lipomas can be found anywhere in the body, especially in the upper back, neck, shoulder, and abdomen, they are rarely found in fingers.3 Here, we present a case of a right middle finger lipoma.

A 72-year-old woman presented with a swelling of the dorsal aspect of her right middle finger at the level of the middle phalanx. She had noticed the swelling 15 years earlier. The lesion showed slow enlargement but remained untreated because she had no symptoms. She worked as a cook and sustained a burn to the swollen area when she accidentally touched a heated pot; therefore, she decided to seek treatment. On physical examination, the mass was soft, freely mobile, and painless on palpation. The overlying skin was normal, and the range of motion was intact. Preoperative computed tomography (CT) revealed a subcutaneous mass (size: 21 mm × 17 mm × 8 mm), and CT contrast was similar to that of fat. The underlying extensor tendon and middle phalanx were intact. Tumor resection was performed under a digital block and digital tourniquet. A zig-zag skin incision was made just above the mass. The tumor was present just beneath the dermis and was well circumscribed and encapsulated (Fig. 1). There were no adhesions nor was invasion into the surrounding tissue. The mass was completely excised, and a histopathologic examination was performed. A microscopic examination revealed a lipoma composed of mature fat cells, with no evidence of malignancy (Fig. 2). No tumor recurrence, restriction in finger movement, or paresthesia was observed over a 4-month follow-up.

The differential diagnosis for a swelling in the hand encompasses a large spectrum of both neoplastic and non-neoplastic lesions.4 The most common lesions are ganglion cysts, inclusion cysts, and giant cell tumors, whereas lipomas are extremely rare in the finger.3 Imaging studies, such as ultrasonography, CT, and magnetic resonance imaging, are useful for detailed investigations and differential diagnoses.

Previous studies1,3,5 have revealed that lipomas can develop in any finger and in any part of the finger. Most cases were painless, with variable degrees of pain and occasional episodes of local paresthesia in 18% and 8% of cases, respectively. Functional impairment was reported in 47% of cases. No functional impairment or tumor recurrences were reported after the surgical excision.
Some reports suggest that surgery is indicated in cases of pain or restricted motion. However, in our case, although the lesion was asymptomatic, its swelling may have been the cause of burn injury. With the low rates of postoperative complications or tumor recurrences, surgical resection may be more widely applicable even for asymptomatic lesions.

Although a lipoma in the finger is rare, it should be included in the differential diagnoses of finger tumors, and surgical resection may be considered as a viable option.

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**DISCLOSURE**

The authors have no financial interest to declare in relation to the content of this article.

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