



## A Case of Glomus Tumor in an Unusual Localization of Hand

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### Abstract

Glomus tumors occur most frequently on finger tips and subungual area. In this case report we present a case of glomus tumor that occurs on 1<sup>st</sup> web space of hand.

### Introduction

Glomus tumors are benign lesions arising from neuro-myo-arterial glomus bodies that are generally localized in the hand. Glomus tumors occur most frequently in distal phalanx area, especially in the subungual area. Although the classically localized ones are more frequently seen in women, they may appear more frequently in unusual locations in male patients, as in our case. Clinically, they present with cold sensitivity, severe pain, and local tenderness. Complete excision is necessary to prevent recurrence [1,2] and it is the only way to relieve the pain because NSAID drugs have been shown to have little effect on pain [3].

### Case Presentation

A 65-year-old male patient was admitted to our clinic with severe pain and palpable swelling in the 1<sup>st</sup> web area of right hand. His complaints had been present for 10 years, but his pain had become unbearable in the last month. He has no pathological history and no trauma history. On examination, the patient had a 1 cm × 1 cm delicate, solid mass in the 1<sup>st</sup> web area of right hand. He had severe pain with palpation. Tinel test was negative. The 2 plain X-ray of hand showed no significant findings (Figure 1a and 1b). Excisional biopsy was planned due to the severe pain of the patient. Neuroma and glomus tumor were considered as preliminary diagnosis. The operation was performed under local anesthesia and the skin was subcutaneously passed through a 3 cm longitudinal incision in the first web interval and the mass was reached after providing the exposure (Figure 1c). Total mass was removed and sent for histopathological examination (Figure 1d). In the early postoperative period, the patient's complaints showed a dramatic regression. Histopathological examination revealed that the mass was glomus tumor. During the 6-month follow-up, the complaints completely disappeared and no recurrence was detected.

### Discussion

Although glomus tumors are mostly seen in the subungual region; the triad of symptoms which include pain, tenderness and cold sensitivity should be considered in the differential diagnosis of patients with triad, regardless of the area of the hand. Glomus tumors cannot be treated appropriately, especially because of the small size of the glomus tumors, the rarity of the classic triple triad in extra digital locations, and not included in the preliminary diagnoses. In our case, we planned surgical treatment as soon as possible due to the severe symptoms of the patient. However, MRI and USG scans will be useful when diagnosis is made. Complete excision seems to be the gold standard treatment. For proper excision, a non-vascular area should be seen around the mass.

Schiefer et al. [5] reported 3 (5.3%) glomus tumor cases in a series of 56 patients with extra digital glomus tumors. [hand (3), wrist (4), forearm (11), elbow (4), arm (4), shoulder (2), hip (1), thigh (5), knee (10), cruris (3), ankle (2), foot (2), back (1), nose (1), cheek (1), earlobe (1), trachea (1)]. This data show us, glomus tumors localized on the hand appear to constitute a small percent given among extra digital glomus tumors [5].

### Results

Glomus tumors are uncommon lesions. In extradigital placement, a limited number of cases have been reported in literature. Due to the small size of the tumors, it is difficult to diagnose.

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**Figure 1:** a: AP view X-ray. b: Lateral view X-ray. c: Intra operative view of glomus tumor after surgical exposure. d: Glomus tumor after excision.

In cases which have the triad of symptoms; pain, tenderness and cold sensitivity should be approached with suspicion. The definitive diagnosis should be made by histopathological examination after complete excision.

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