

A RARE CASE OF MULTIFOCAL GIANT CELL TUMOR OF THE TENDON SHEATH

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Introduction: Giant cell tumors of tendon sheath (GCTTS) are second most common tumors of the hand. This localized form of pigmented villonodular synovitis account for 10-15% of hand tumors. Despite multiple pathogenetic theories, the etiology of GCTTS remain unknown. We present a rare case of multifocal GCTTS that is rarely described in literature.

Discussion: A middle-aged gentleman presented to us with multiple painless swellings that was progressively increasing in size over left index finger for past ten years. On examination there were four well defined swellings over volar aspect of the finger. Intraoperatively the flexor sheath was exposed with a Bruner's incision whilst preserving the neurovascular bundles. Four separate circumferential tumors were identified overlying the flexor sheath at the level of A1, A3, A5 pulleys and proximal phalanx . They appeared to be brown-yellowish encapsulated, multi lobular masses. The histopathological examination was suggestive of benign tenosynovial GCT. The annual incidence GCTTS is 9.2 cases per million, however probability of a multifocal GCTTS is extremely rare. Ushijima.et.al only describes one patient in a series of 207 cases that displays a multifocal presentation. As the pathogenesis of GCT remains controversial, the cause of multifocal presentation remains unidentified. In one study, insufficient excision of tumor was related with polycentric presentation. It has been reported that the local recurrence after surgical excision occurred in up to 44% of cases. Radical resection while preserving the functions of the affected tendon and adjacent structures is the treatment of choice. A complete excision might pose challenging problems because they often involve tendon and neurovascular structures as in our case.

Conclusion: Multifocal GCTTS is a relatively rare presentation with a high rate of recurrence. Our case indicates that it would be required to evaluate the possibility of multifocal GCTTS in patients with soft-tissue swelling of the hand albeit its rare occurrence.