

## CASE REPORT

# Tuberculous Compound Palmar Ganglion

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## ABSTRACT

**Introduction:** Compound palmar ganglion of tuberculous etiology is an infrequent condition, which has an obvious clinical picture, but still overlooked and should be diagnosed earlier before the involvement of underlying bones and nerves.

**Case report:** We present the case of a 56-year-old male presenting with progressive swelling of the palm and forearm. He was diagnosed to have chronic flexor tenosynovitis without involvement of the underlying bones and was treated by complete excision and antitubercular therapy (ATT).

**Conclusion:** Tuberculous palmar ganglion is a condition that can be managed by excision and chemotherapy. However, it presents as a challenge to rural surgeons where the patients present late. Hence, early identification and treatment are the main goals of this article.

**Keywords:** Antitubercular therapy, Chronic flexor tenosynovitis, Compound palmar ganglion, Melon-seed bodies.

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**Conflict of interest:** None

## INTRODUCTION

Ganglions are as old as Hippocrates, who first described the condition as “knots of tissue containing mucoid flesh.”<sup>1</sup>

Compound palmar ganglion, also known as chronic flexor tenosynovitis, is a condition involving the flexor tendons around the wrist, above and below the flexor retinaculum. Most common etiologies are tuberculosis and rheumatoid arthritis. It is very common in developing countries. In tuberculous tenosynovitis, the route of infection can be either direct inoculation or by hematogenous focus of lungs/lymph nodes, etc. Identification of the condition and early initiation of treatment is essential considering the various differential diagnoses that resemble this condition.

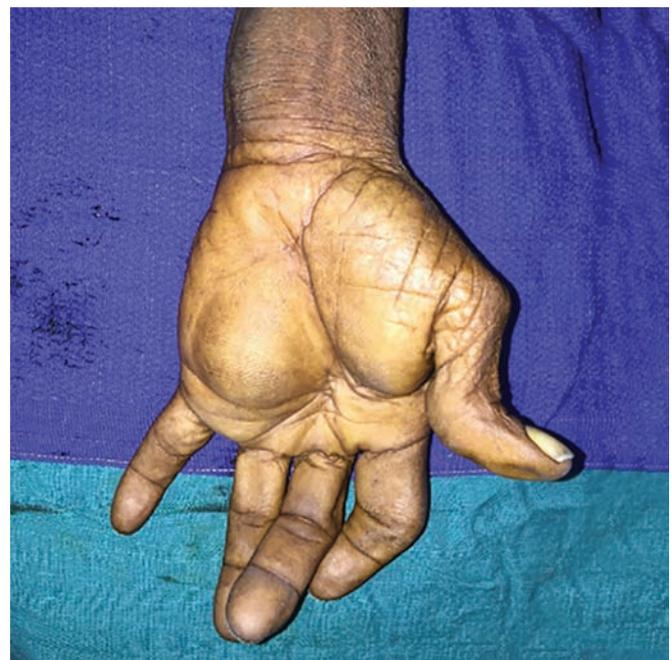
## CASE REPORT

A 56-year-old farmer came with complaints of a painful and progressively increasing swelling in the right wrist for a duration of 6 months (Fig. 1). There was no tingling and numbness over the fingers. He did not have the classical loss of appetite and weight loss scenario of tuberculosis. There was no contact history of tuberculosis.

Examination revealed a bilobed swelling, proximal and distal to the flexor retinaculum with a positive cross-fluctuation test. His median and ulnar nerve territory had normal sensations.

Radiographs of the hand were normal. The magnetic resonance imaging of the hand and forearm was reported as compound palmar ganglion without any neurovascular compression.

Excision of the lesion was carried out under regional anesthesia. Flexor retinaculum was divided to reveal a bilobed mass (Fig. 2), which was incised to let out all the melon seed-like bodies (Fig. 3), and the cyst wall was excised. Thorough wound wash was given and wound was primarily closed. Polymerase chain reaction was reported as positive for *Mycobacterium tuberculosis*. Histopathological examination revealed multiple granulomas and caseous necrosis. Antitubercular therapy (ATT) was started on the 3rd day postsurgery. Finger mobilization was started on the



**Fig. 1:** Compound palmar ganglion in the palm extending to the forearm as a bilobed mass

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**Fig. 2:** Bilobed mass extending proximal to flexor retinaculum



**Fig. 3:** Melon-seed bodies—content of the ganglion

3rd day postsurgery. Wrist mobilization was started at the end of first week postsurgery. After 6 months postsurgery, the patient recovered well and had an almost normally functioning hand.

## DISCUSSION

Tuberculosis is still a widespread disease in India. Though lymph nodes are the most frequent extrapulmonary site for TB,<sup>2</sup> tuberculous infection of the tenosynovium is one entity that should not be delayed in treatment because of the destructive nature of the lesion and the permanent disability it causes. Melon seed bodies are characteristic of compound palmar ganglion of tuberculous etiology.

Immediate initiation of treatment in the form of complete debulking and ATT is essential because of the notorious nature of the disease, as it destroys the underlying bones. After debulking, early physiotherapy is essential to attain the maximum functionality of the hand.

## CONCLUSION

Tuberculosis may masquerade as a ganglion of wrist. This is a curable condition, and strenuous efforts should be taken to treat this condition as early and completely as possible. Early diagnosis and treatment matter the most in this condition.

## CONSENT

Written informed consent was obtained from the patient for publication of this case report and any accompanying images.

## ACKNOWLEDGMENT

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