



Images in clinical practice

**Gouty Tophi : A rare cause of Carpal Tunnel Syndrome.**

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**a:** Right hand X-rays showing soft tissues swelling around the metacarpophalangeal joints of the 2<sup>nd</sup> and the 5<sup>th</sup> fingers.

**b:** Ultrasound showed a diffuse soft tissue thickening in the carpal tunnel with mass effect on the median nerve as well as cystic mass pointing cranially from the radio-carpal joint.

**c:** MRI showing a flattening of the median nerve in a crowded carpal tunnel at the level of the hamate with 1.3x0.5cm cystic mass at the level of the distal radius.

**d:** Intraoperative findings

### Comments

A 36-year-old male patient with history of gout presented with recurrent right wrist pain and swelling of three months duration. There were no associated symptoms. The examination showed swelling mass of the volar right wrist with signs of median nerve compression. The radiological examinations done including X-rays, joint ultrasound and MRI confirmed carpal tunnel syndrome with flattening of the median nerve in a crowded carpal tunnel due to thickened soft tissues and 1.3x0.5 cm cystic mass at the level of the distal radius. Surgical decompression was indicated to control the symptoms and to rule out the mass origin. The post operative course was uneventful with objective improvement of the symptoms. Histopathologic examination of the resected specimen showed pale basophilic material surrounded by histiocytes and foreign body type giant cells in favor of gouty tophi.

Gout is a disease featuring acute arthritis, joint deformity and severe pain caused by the deposition of monosodium urate crystals in and around synovial tissue [1]. Carpal tunnel syndrome is a rare condition in these cases. It indicates the severity of the disease and its delayed treatment [2]. Gouty tophi should be entertained as a cause of carpal tunnel syndrome in the appropriate patient population [3]. Early tophi surgical excision combined with trioxypurine treatment may improve the outcomes of carpal tunnel syndrome and allow to avoid irreversible complications [4].

**Conflict of Interest:** None

### References

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