

## INTRODUCTION

- Scaphotrapezial-trapezoidal (STT) joint degenerative arthritis is usually an incidental finding on radiographs and is also a common degenerative disease of the wrist.
- Studies have shown that multidirectional instability is an important cause. Gender (more common in females), people older than 50 years of age, genetics and previous injury all serve as typical risk factors for STT joint arthritis.
- Common symptoms include radial-sided wrist pain, swelling and tenderness over the STT joint. These symptoms are usually accompanied by loss of grip force and thumb function which may progress over time.
- These findings have not been well documented on special populations such as young drummers or other musical artists.

## CASE

- 42-year-old right-handed male presents with pain on the radial aspect of his right wrist. He is a professional drummer who began playing since he was 11 years old.
- His pain began 3 years ago and is described as dull, constant pain that is aggravated by drumming performances and steering his bicycle. It improves with rest and NSAIDs, does not radiate, and is rated a 6/10 at its worst and 2/10 at its best.
- Other than a fall on his outstretched hands a year ago, the patient denies any history of trauma. He denies weakness, numbness, or tingling over the affected area. Patient is currently not taking any medications.

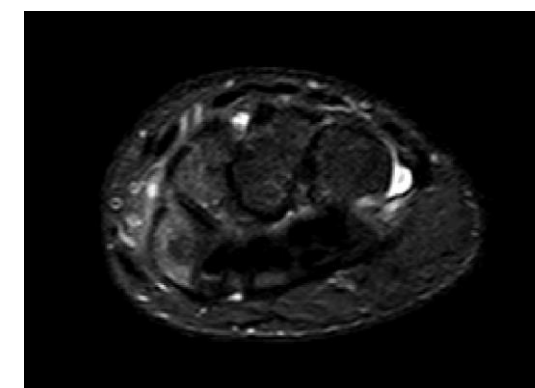
## PHYSICAL EXAMINATION

- Inspection: mild swelling on radial aspect of wrist, but no erythema.
- Palpation: Exquisite tenderness on the following: scapho-lunate and scapho-trapezial joint region of the wrist, flexor carpi radialis and both extensor pollicis longus and brevis tendons. Palpation over the anatomical snuff box did not elicit pain.
- Range of motion: Painful during active and passive wrist abduction.
- Strength: Full strength
- Sensation: Intact
- Special tests: Positive Finkelstein. Negative thumb axial grind test

## X-RAYS:



## MRI



## DISCUSSION

- STT arthritis typically presents as pain and grip weakness when performing daily activities such as opening a jar and/or wrist abduction. Tendinopathy along the flexor carpi radialis (FCR) tendon may occur as it courses under the trapezial ridge to its distal insertion at the second metacarpal base.
- In order to diagnose STT arthritis, a detailed physical examination and three-plane radiographs are necessary. In case of atypical cases, an MRI may be performed to confirm the diagnosis.
- No specific predisposing occupation or activity has been thoroughly investigated, although cases have been reported among heavy equipment operators.
- Patient has not participated in contact sports, worked with heavy equipment, nor has a history of trauma. It can be theorized that his STT arthritis arose from repetitive activity during drumming performances throughout the years.
- The patient was prescribed thumb Spica splint, NSAIDs, and physical therapy. A corticosteroid injection will be the next step in his next visit if symptoms recur.

## CONCLUSIONS

- STT joint arthritis has not been well documented on the young, artistic population.
- Repetitive activity among drummers and other musicians can lead to degenerative changes that may interfere with their passions and quality of life.
- Future research should focus on prevention and diagnosis of these injuries in the artistic population.

## REFERENCES

1. Wu JC, Calandruccio JH. Evaluation and Management of Scaphoid-Trapezium-Trapezoid Joint Arthritis. *Orthop Clin N Am* 50 (2019) 497-508. <https://doi.org/10.1016/j.ocl.2019.05.005>
2. Wollstein R, Clavijo J, Gilula LA. Osteoarthritis of the Wrist STT Joint and Radiocarpal Joint. *Arthritis*. 2012;2012: 242159. doi:10.1155/2012/242159
3. Bhatia A, Pisoh T, Touam C, et al. Incidence and distribution of scaphotrapezio-trapezoidal arthritis in 73 fresh cadaveric wrists. *Ann Chir Main Memb Super* 1996; 15(4): 220-5.
4. Ferris BD, Dunnett W, Lavelle JR. An association between scaphotrapezio-trapezoid osteoarthritis and static dorsal intercalated segment instability. *J Hand Surg Br* 1994;19(3):338-9.
5. Brown GD, III, Roh MS, Strauch RJ, Rosenwasser MP, Ateshian GA, Mow VC. Radiography and visual pathology of the osteoarthritic scaphotrapezio-trapezoidal joint, and its relationship to trapeziometacarpal osteoarthritis. *Journal of Hand Surgery*. 2003;28(5):739-743.
6. Wollstein R, Watson HK. Scaphotrapeziotrapezoid arthrodesis for arthritis. *Hand Clin* 2005;21:539-43.