

Rat study provides insights on tendon overuse injuries

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In research conducted in rats, investigators have shown for the first time the effect of rotator cuff tendon overuse, or tendinopathy, on surrounding tissues.

Such overuse is among the major causes of [shoulder pain](#) and discomfort in athletes, laborers, older adults, and those who use a repetitive overhead motion in daily activities. Untreated tendinopathy can lead to full or partial rotator cuff tendon rupture, requiring [orthopaedic surgery](#) and a potentially long and painful recovery.

Over a 10-week period, both degeneration of the shoulder tendon and osteoarthritis-like changes to neighboring cartilage were observed.

The study may help clinicians determine the optimal type and timing of treatment for tendon overuse injuries to reduce further damage.

"This is an exciting finding as it is the first demonstration that overuse injuries may impact more than just the [shoulder](#) tendons. Thus, this study may provide motivation for further research in humans to better protect the [shoulder joint](#) as a whole from these types of injuries," said Dr. Johnna Temenoff, senior author of the *Journal of Orthopaedic Research* study.

More information: Akia N. Parks et al, Supraspinatus tendon overuse results in degenerative changes to tendon insertion region and adjacent humeral cartilage in a rat model, *Journal of Orthopaedic Research*

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