The Application of Ultrasound Guided Knee Arthroscopy For Calcified Patellar Tendinopathy In Elite Weight Lifter

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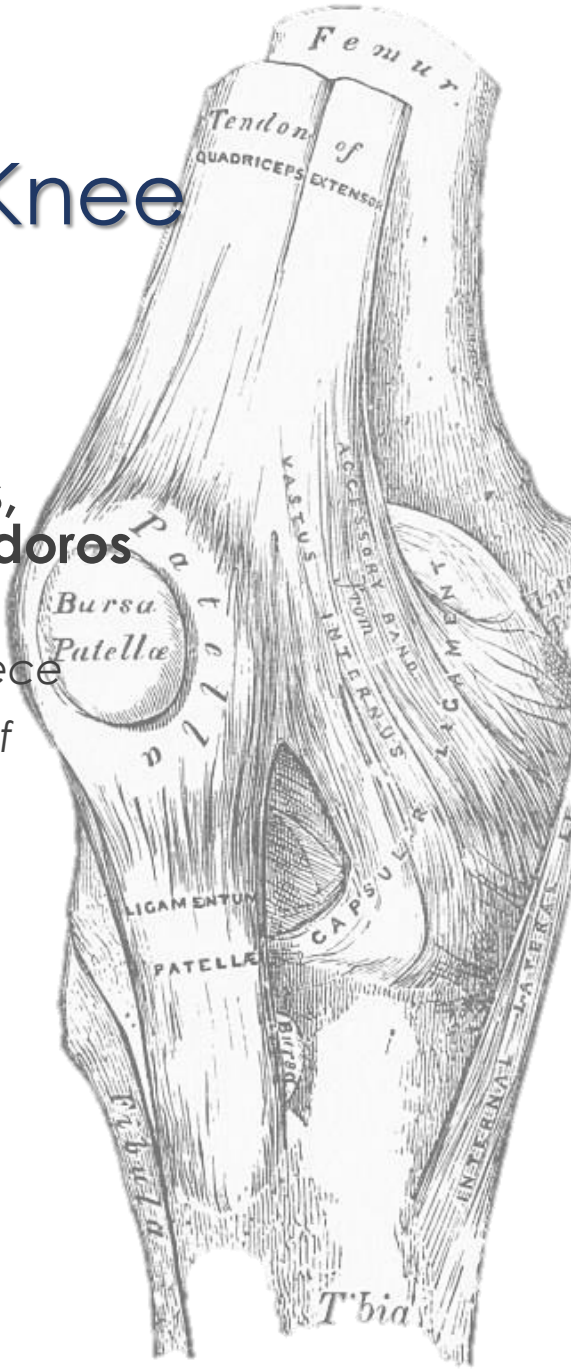

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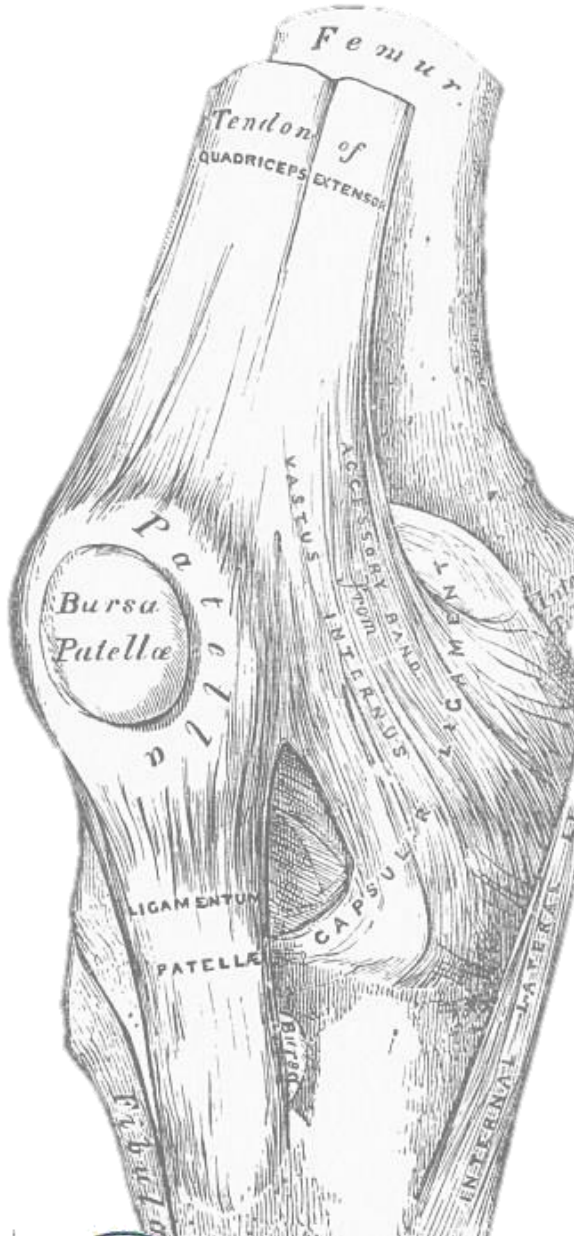
Disclosures

- No conflict of interest to declare.
- No funds to declare for this study.



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METHODS

Background

Patellar tendinopathy is commonly observed in Weight Lifters due to overuse injury from deep squatting or knee protraction in snatch and clean and jerk exercises. The repetitive movements predispose to initial tendinitis and subsequently calcification of the patellar tendon in various positions and particularly at its insertion, and is more frequently observed in patients with a history of Osgood–Schlatter disease. Aim of the study was to define the clinical outcomes following the concomitant use of ultrasound scan with knee arthroscopy in the management of calcified patellar tendinopathy.

Methods

Elite weightlifters with calcified patellar tendinopathy resistant in conservative treatment were included in the study. Clinical examination and Magnetic Resonance Imaging (MRI) were used for diagnosis. All patients underwent arthroscopy by a single surgeon.Arthroscopy was performed under ultrasound guidance.Calcified lesions within the tendon were identified with the use of ultrasound scan intra-operatively and subsequently the lesions were removed arthroscopically. The clinical outcome was assessed by recording and comparing the IKDC score pre- and post-operatively and at a minimum 1-year follow-up post-operatively.

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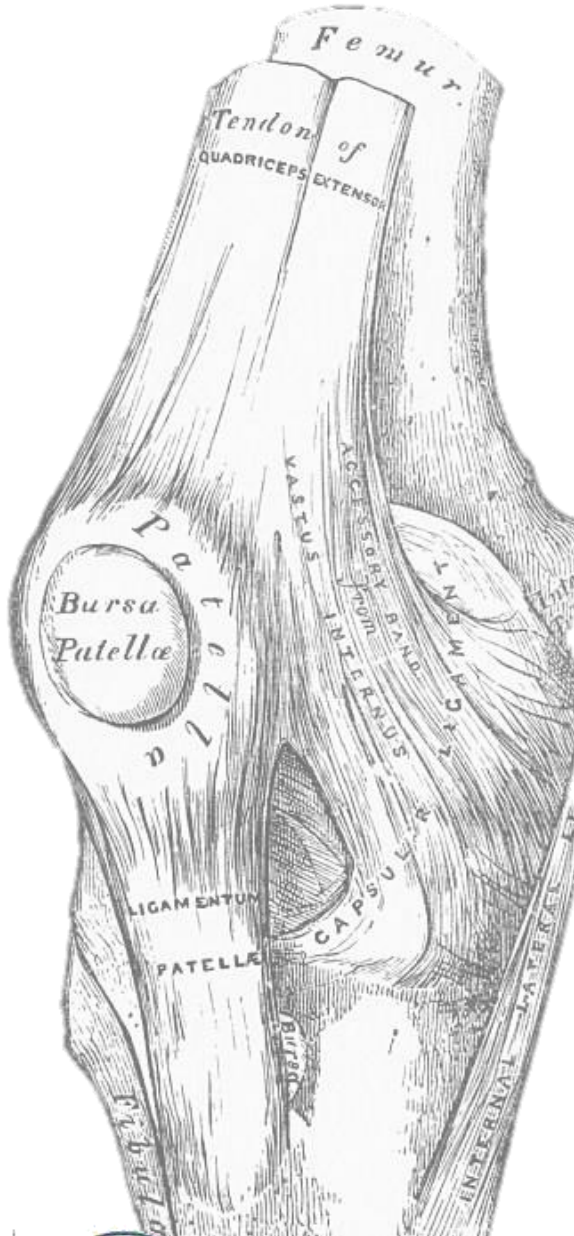
RESULTS

Twelve weightlifters (11 males, 1 female) with mean patient age 24.2 (range: 18-31) years were included in the study. Three patients had a known history of Osgood-Schlatter disease. The mean IKDC score improved from 26.5% (range: 22.9-29.8%) pre-operatively to 96.8% (range: 85.4-98.9%) post-operatively, indicating excellent clinical outcomes. All patients returned back to full activity within 3(range:) months. One patient, with history of Osgood-Schlatter disease, was required to have a revision operation in a 3-month period.



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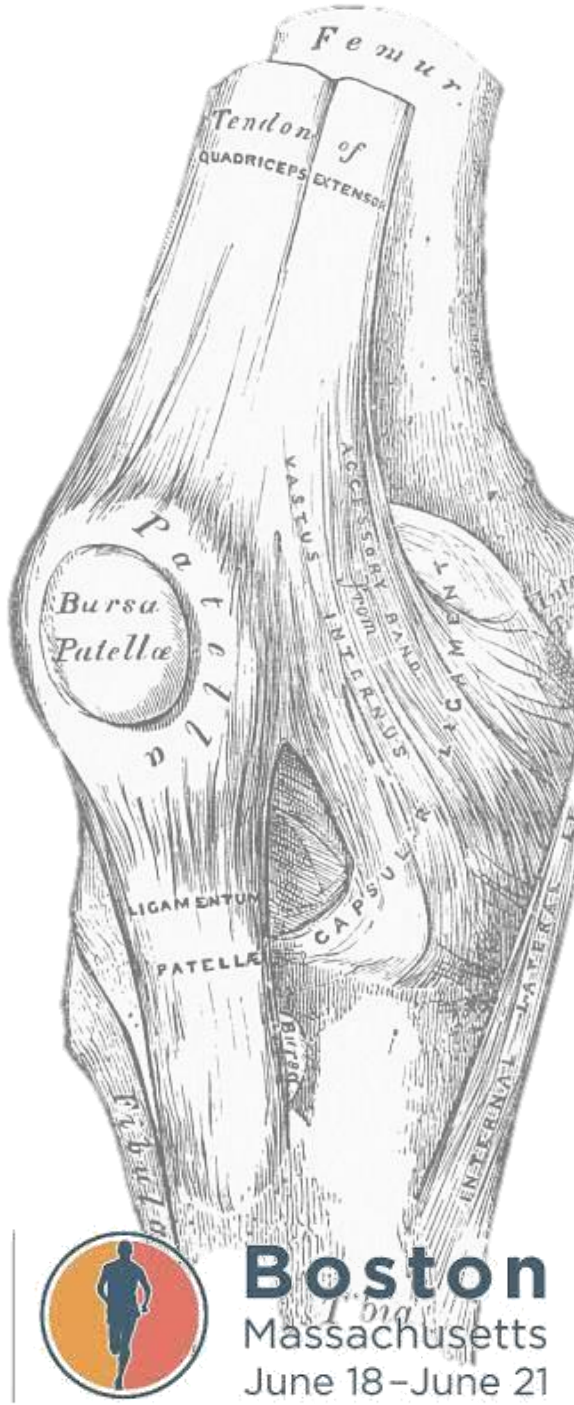
Conclusions

Ultra-sound guided knee arthroscopy is a safe and effective method for the management of calcified patellar tendinopathy. Excellent clinical outcomes and satisfying return to sport rate were observed in these athletes at a mean 4-year follow-up time.



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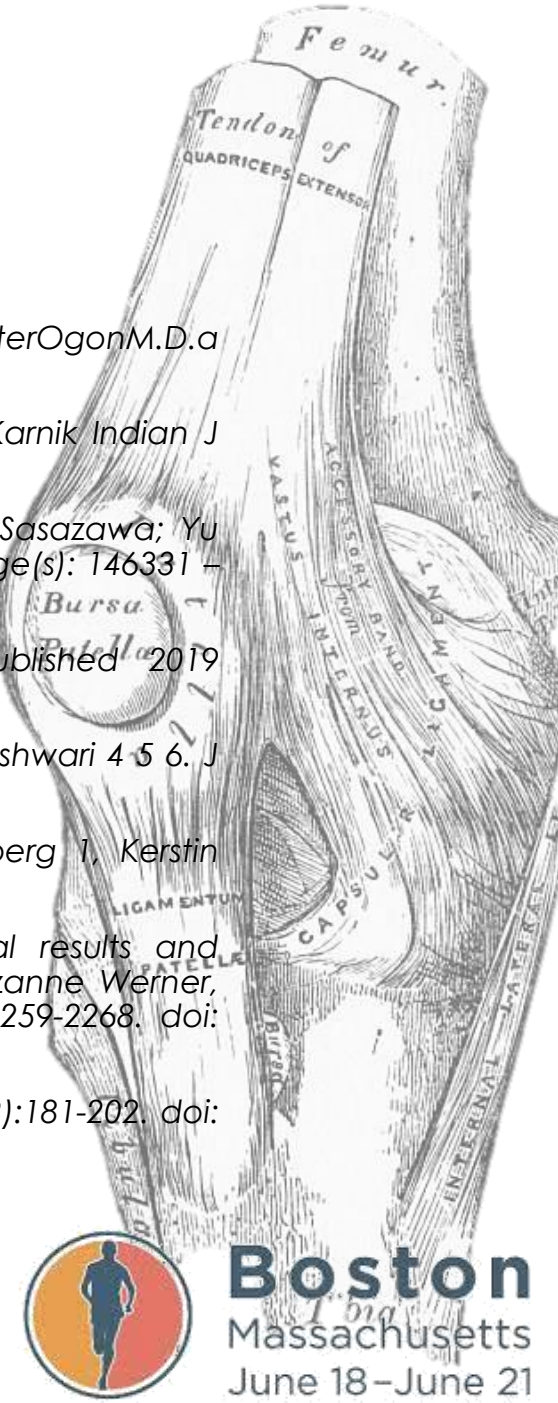

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