

Clinical Weekly - 157th Edition

#JournalTuesday - by Abi Peck

Isometric exercise induces analgesia and reduces inhibition in patella tendinopathy

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1. Did the trial address a clearly focussed issue?

Yes

- -Does isometric exercise reduce pain in people with patella tendinopathies
- -Outcomes: pain, strength, corticospinal excitability
- -Population: 6 male athletes with patella tendinopathy bilateral/unilateral
- -Intervention: isotonic vs isometric

2. Was the assignment of patients to treatments randomised?

Subjects chose intervention from opaque envelopes

3. Were all of the patients who entered the trial properly accounted for at its conclusion?

Yes

4. Were patients, health workers and study personnel 'blind' to treatment?

Patients - no, testers - were blinded

5. Were the groups similar at the start of the trial?

- -Yes, 6 males who all played volleyball at the same level
- -Unilateral or bilateral tendinopathies
- -Length of pain? Age varied 18-40 years

6. Aside from the experimental intervention, were the groups treated equally?

Yes

- -Same method for each participant
- -Used perceived exertion scales for both methods of testing

7. How large was the treatment effect?

There was statistically significant reduction in pain scores following the interventions. However, they used a small sample size of 6. Results were discussed for each outcome investigated.

8. How precise was the estimate of the treatment effect?

P< 0.001 confident that these results are not due to chance

9. Can the results be applied in your context?

- -No, only 6 male athletes used in this study
- -Cannot apply to females or sedentary patients

10. Were all the clinically important outcomes considered?

Yes

-Pain and strength were considered

11. Are the benefits worth the harms and costs?

Yes

- -No harms of the study were reported
- -Everyone improved











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#NEWSOFTHEWEEK - by Liz Wright

1. Knee OA: Put the knife down and embrace exercise therapy

Dr Barton based at La Trobe University article discusses the over reliance on surgery in Australia and some safer more cost effective alternatives. > half of people with knee OA are under 65, working age and often in child caring years. This group of population often seek out quick solution to their symptoms. Based on current evidence there does not appear to be any superior form of exercise – so either/mix of aerobic activity, resistance and functional training, best tailored to the individual. Forms of exercise do appear to produce superior outcomes to arthroscopy, paracetamol, NSAIDs and weight reduction interventions. Benefits of hydrotherapy are not as strong as land-based exercise, though may still be valuable for those with too much pain to exercise in weight-bearing. Fear-avoidance in those with knee OA is common and supervision is beneficial in providing re assurance, also providing feedback to the patient from the practitioner (quality/adjustments of exercises). A greater number of supervised aerobic exercise sessions optimises outcomes, with a minimum of 12 sessions suggested. 3 or more exercise sessions a week should be completed which may reduce pain and improve function > completing < 2 sessions. This should be sustained independently in the long term to minimise/avoid and /or delay the requirement of pharmacotherapy injections and surgery. Overall key recommendations are appropriate education, exercise therapy and weight management. TICK – though should we be extending group sessions > the current number in the UK? Views welcome. http://vaau.zone-secure.net/drive/9201/405104/#page=40

2. Exercise and the Prevention of Depression: Results of the HUNT Cohort Study

Undertaking regular leisure-time exercise was associated with reduced incidence of future depression but not anxiety. The majority of this protective effect occurred at low levels of exercise and was observed regardless of intensity. From the study's cohort (33,908 adults prospectively followed for 11 years) it was estimated 12% of future cases of depression could have been prevented if participants had engaged in just 1 hour of weekly exercise. http://bit.ly/2wAijkE

3. Individuals with plantar heel pain (PHP) 5x more likely to have unmanaged LBP.

Individuals with PHP had a greater prevalence of LBP and higher low back disability that was correlated to reduced foot and ankle function. Treatment to address both local and proximal impairments, including impairments related to LBP, may be indicated to develop the management of PHP. http://bit.ly/2y3QrJ5











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#NewsOfTheWeek - by Liz Wright

4. High-Intensity Resistance and Impact Training Improves Bone Mineral Density and Physical Function in Postmenopausal Women with Osteopenia and Osteoporosis: The LIFTMOR Randomized Controlled Trial

High-intensity resistance and impact training applies loads and is not traditionally recommended for individuals with osteoporosis because of a perceived high risk of fracture. However this brief program of high-intensity resistance and impact training enhances indices of bone strength and functional performance in postmenopausal women with low bone mass. Opposing current opinion, this programme was induced no adverse events under highly supervised conditions for the sample of otherwise healthy postmenopausal women with low to very low bone mass. http://bit.ly/2kqlSYJ

If you have any comments/suggestions/discussion points on any of the current/previous news topics please let me know via elizabeth.wright1@nhs.net

#FRACTUREFRIDAY BY JOE RUSSELL

<u>Carpal bone Fracture - Trapezoid Fracture</u>

Anatomy

The trapezoid is the smallest of distal row of the carpal bones. It is wedge shaped with the widest aspect facing dorsally.

Epidemiology

Fractures of the Trapezoid are the least common of all the carpal bones, reported as 0.4% of all carpal fractures. Subluxation of the trapezoid is far more common with the commonest method of injury of delivering a blow (punch).

Management

Most will be managed conservatively but surgical management is an option should resolution not occur.



Resources

http://bit.ly/2gdCui7 http://bit.ly/2yKKTjB







