



Clinical Weekly - 163rd Edition

#JOURNALTUESDAY - by Abi Peck

Heavy slow resistance versus eccentric training as treatment for Achilles tendinopathy: A randomised controlled trial [Download here](#)

1. Did the trial address a clearly focussed issue?

Yes, group used was appropriate and had clear comparative test conditions.

2. Was the assignment of patients to treatments randomised?

Yes, computer generator was used to randomly assign patients

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

Yes, the study used a single blind method where an independent investigator analysed the results. It was not possible to blind the patients based on the nature of this study.

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

Yes, there were no significant differences between both groups

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

Yes, aside from the different intervention (exercises and training protocol), all were given the same advice about management and progression of exercises.

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

Yes, the study explained reasons why some patients didn't continue with study i.e. moved away, didn't turn up, lack of time, partial Achilles rupture, back/ankle pain etc.

7. How large was the treatment effect?

There were significant improvements made in both groups between 0-52 weeks. There were no significant differences between the two intervention groups.

Measures: VAS scores from questionnaires and ultrasound Doppler

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

Results show that intervention groups showed a statistically significant improvement. Confidence intervals varied depending on objective measure.

9. Can the results be applied in your context?

Yes and no, the study looked at patients with midportion tendinopathy, may not be able to generalise findings to patient with insertional tendinopathies. They also looked at 58 athletes; a lot of the patients we see are sedentary and physically inactive.

10. Were all the clinically important outcomes considered?

Yes, improvements in pain, function and structural appearance were all considered.

Could have looked at strength

11. Are the benefits worth the harms and costs?

Yes, good outcomes and minimal expenditure. X1 patient had a partially ruptured Achilles while playing sport. Did the strength training cause additional load/ stress?





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#NEWSOFTHEWEEK - by Liz Wright

1. The Big R's...

An event, put forward by Jack Chew and physio matters podcast team and Connect Health called 'Reasoning, responsibility, and reform in MSK practice' was held recently. Adam Meakins summarises the event after his attendance (see link below). The aim of the event was to invite 60 clinicians (experienced practitioners to students), academics, researchers, managers, and policymakers from various fields of physiotherapy (NHS based and private sectors) to discuss and devise strategies for the forwards movement of the physiotherapy profession.

Recognition was made that change is hard and we need to ask difficult questions to prompt this. Dr Graeme Wilkes (a medical director) put forward his views that physiotherapy is in a prime position to lead MSK healthcare; physiotherapists should remember (in a modest way!) they are key members in the MDT, and should feel confident when liaising with orthopaedic surgeons; capable of challenging views if indicated. The evidence around many orthopaedic surgical interventions for non-traumatic MSK conditions is being challenged significantly. The evidence for increasing physical activity and exercise in many MSK conditions continues to be widely promoted. We must demonstrate our capabilities to deliver exercise-based interventions without being 'distracted' by passive modalities with a poor evidence base. Connect Health shared their traffic light system. A green light = strong evidence that this intervention should always be done; amber = ambiguous evidence; red = no strong evidence. If a physio uses an amber intervention justification 'why' is required. A red intervention = reprimanded. This strategy would demand consistent and clear clinical reasoning amongst staff and for that reason this strategy may be viewed as a positive step. (Thoughts welcome!). Research is key to our profession, and improvements in engagement, reading and implementation are required. Barriers of time, access, apathy and boredom were identified. A key question was how can more physio's become interested in research? Better Funding? Appoint a physio's research champion per department? Undergraduate programs to focus on this from day one?

Follow the hashtag #TheBigRs to find out more.

<https://thesports.physio/2017/11/11/the-big-rs/>

Managing Back Pain in Athletes The Cognitive Functional Therapy

Reference: by P. O'Sullivan, *Aspetar Sports Medicine Journal* 2015

Designed by eYLMsportScience with

Targeting the modifiable beliefs & behaviours that drive pain & disability

VS

Simply treating the symptoms of pain

Integrated Person-centred Goal-oriented

Fear reduction through understanding pain, control strategies and building confidence in feared activities

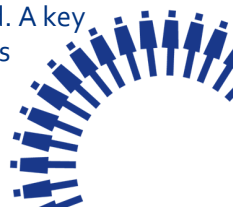
COGNITION

1. Address negative beliefs and fear regarding pain with positive information regarding the spine's resilience
2. Provide epidemiological advice regarding MRI findings
3. Educate the patient regarding the multidimensional bio-psychosocial mechanisms that drive the vicious cycle of pain & disability
4. Promote active coping strategies for pain - installing confidence and hope for change
5. Facilitate goal-orientated behavioural change regarding stress management, sleep, physical activity, pacing & diet
6. Train mindfulness of body & movement
7. Feedback is critical and involves:
 - Mindfulness of the body/mind responses to pain, movement and its perceived threat,
 - Visual feedback (mirrors, video & written instruction)

Addressing life factors: sleep habits, regular physical activity based on preference, obesity & social engagement

1. Identify maladaptive movement & pain behaviours
2. Break provocative movement patterns down into component parts
3. Retrain in a mindful/relaxed manner to provide strategies that will enable the patient to master pain control
4. Target the 'new' movement behaviours towards the activities and movements that provoke pain
5. Integrate gradually these new behaviours into the patient's daily life and sporting activities
6. Incorporate strengthening & conditioning as required by the functional goals of the patient & the specific demands of the sport
7. In case of poor coping strategies, consider pacing and the use of diaries

BEHAVIOR





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#NEWSOFTHEWEEK - by Liz Wright

2. A targeted cognitive functional approach for the management of back pain - Peter O'Sullivan

Hopefully most are aware of the brilliant article written by Peter O'Sullivan (see link) – even better there has now been a handy info graphic released to highlight key recommendations.

<http://www.aspetar.com/journal/upload/PDF/2015419164013.pdf>

#FRACTUREFRIDAY BY JOE RUSSELL

Carpal bone Fracture - Pelvis Fractures

Anatomy

The bony pelvis is formed by the sacrum and coccyx and a pair of hip bones. Its primary function is the transmission of forces from the axial skeleton to the lower limbs as well as supporting the pelvic viscera. Until puberty, each hip bone consists of three separate bones yet to be fused: ilium, ischium and pubis connected by the triradiate cartilage. The two hip bones are joined anteriorly at the pubic symphysis and posteriorly to the sacrum at the sacroiliac joint. The hip bones incorporate the acetabulum, which articulates with the proximal femur at the hip joint.

There are a number of anatomical differences between the male and female pelvis to allow for childbearing. The female pelvis has a wider, rounder inlet, has a shorter more triangular sacrum and larger greater sciatic notch and obturator foramen.

Epidemiology

Like much trauma, there is a bimodal distribution with younger male patients involved in high-energy trauma and older female patients presenting after minor trauma.

Eg:

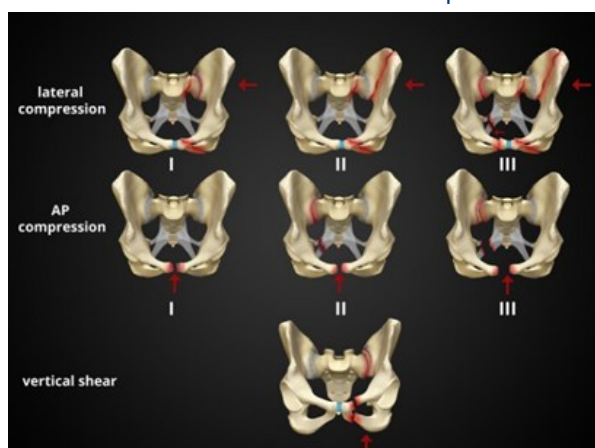
Motor vehicle collision (~50%)

Pedestrian vs. motor vehicle (~30%)

Fall from height (~10%)

Motorbike collisions (~4%)

There are different classifications of pelvis fractures:



Management

Treatment and prognosis depend on the type of injury. Simple fractures are treated by immobilisation. Multi-part acetabular fractures require reconstruction by an experienced operator. Complex pelvic ring fractures may require external fixation. Pelvic fractures carry a significant mortality and morbidity.

<https://radiopaedia.org/articles/pelvic-fractures>

