

Clinical Weekly - 173rd Edition

#JournalTuesday - by Abi Peck

A systematic review of shockwave therapies in soft tissue conditions: focusing on the evidence Download here

1. Did the review address a clearly focused question?

Yes – does shockwave therapy help for selected soft tissue injuries. All the studies looked at had to have similar populations at baseline and had to have a control vs intervention of shockwave therapy. The principle outcome of all studies was pain.

2. Did the authors look for the right type of papers?

Yes – looked at articles from different sources that focussed on the use of shockwave and over last 30 years (slightly outdated).

3. Do you think all the important, relevant studies were included?

Yes – although the database search only included published studies.

4. Did the review's authors do enough to assess the quality of the included studies?

They excluded studies that were uncontrolled, had methodology errors, poor baseline characteristics, invalid outcome measures or poor statistical analysis's.

5. If the results of the review have been combined, was it reasonable to do so?

Yes – combined information from similar studies with the same pathologies. Explained the similarities or differences.

6. What are the overall results of the review?

Benefit in high dose shockwave therapy in plantar fasciitis and some evidence in the use of high-dose shockwave therapy in midportion and insertional achilles tendinopathies. No evidence to support the use of shockwave therapy for other conditions. Lack of evidence / studies done to confirm or refute this, in this study.

7. How precise are the results?

The studies used to support the use of shockwave therapy did have statistically significant differences between control groups and intervention groups.

8. Can the results be applied to the local population?

A lot of the patients used in this study can be applied to MSK physiotherapy in the UK. Patients treated are likely to be of different ages and to have symptoms around 3 months by the time they come to physiotherapy.

9. Were all important outcomes considered?

Main outcome to consider was reducing pain. Future studies may benefit from looking at the physiological changes or functional improvements after shockwave therapy to soft tissues.

10. Are the benefits worth the harms and costs?

Risks (contraindications / adverse effects to shockwave):

-"Commonly reported side effects or adverse events of ESWT include pain during and shortly after the intervention, local edema, erythema, paresthesia and bruising. Contraindications against ESWT include use over or near bone growth center until bone growth is complete, malignancy in or near the treatment area, infection in the area to be treated, coagulation disorder or taking anti-coagulant medications, prosthetic device in the area to be treated, over ischemic tissues in individuals with vascular disease, nerve or nerve root irritation, pregnancy and pacemakers" (Washington State Health Care Authorities, 2017)

-Cost of equipment

Benefits:

- -Symptom relief in patients with plantar fascia
- -Can be considered a method of treatment in accordance with NICE guidelines for refractory plantar fasciitis. "The evidence raised no major safety concerns; however, the evidence on its efficacy was inconsistent. NICE concluded that this procedure can be used provided there are 'special arrangements for clinical governance, consent and audit or research' (NICE, 2015).

References:

National Institute for Health and Care Excellence (2015) Plantar fasciitis.

Available at: https://cks.nice.org.uk/plantar-fasciitis#!scenario (Accessed: 7/02/2018)

Washington State Health Care Authorities (2017) Extracorporeal shock wave therapy for musculoskeletal

conditions: Final evidence report. Available at:

 $\underline{https://www.hca.wa.gov/assets/program/eswt-final-evidence-rpt-20170214.pdf} \ (Accessed: 7/2/2018).$











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#NEWSOFTHEWEEK - by Liz Wright

1. What to do - and what not to do - to deal with low back pain

Written by Dr Mary O'Keeffe and Dr Kieran O'Sullivan, this piece is both ideal for clinicians and patients in improving awareness. http://bit.ly/2EOdZmC



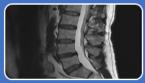
•Don't panic- like getting tired or getting a cold, almost everybody will experience low back pain at some point. Some can be severe and frightening, though most recover within 6-8 weeks, often without needing Rx. Similar to migraines and asthma, if a person experienced an episode of low back pain in the past, they will probably experience it again. It isn't rare/serious thing. Understanding the triggers and what a person should and should not do is more useful than trying to prevent it.



•Don't rush Rx—can lead people being referred for a vast array of costly and ineffective interventions. E.g most people belive that an x ray or MRI will identify their cause of low back pain, leading to a better Rx plan. Strong evidence shows that rare and serious disease is present in approx 1% and a scan is only essential if this is suspected. If used too frequently, scans can lead to worse (not better) outcomes. Paracetamol, anti-inflammatories and even opioid medicines do not speed up recovery and have greater potential for harm. If a person feels like trying pain medicines, they should first opt for a simple over-the-counter option, as they often have the same effect as stronger prescription painkillers.



•Don't be put off by medical jargon and opinions - Research has clearly shown that discs, bones, joints in the back do not go "out of place" or "slip". The term "a slipped disc" is inaccurate and harmful as it suggests that the spine is vulnerable. The discs are firmly attached between the vertebrae and can't "slip" out of place. While the "crack" people experience can feel nice and reduce pain, any benefit is short-term. It is also due to changes in the nervous system and muscle relaxation, not to adjusting the positions of discs and joints.



•Don't worry about what you read in MRI reports- The report will always show "stuff", but much of it can be poorly linked with pain. Research has shown that people who don't have low back pain have disc bulges, disc degeneration, disc protrusions and facet joint degeneration. These things are normal parts of the aging process- like grey hairs or wrinkles.



•Don't be fooled by quick fixes - When a person's low back pain is at its worst and the person tries these approaches, he/she is likely to feel better, as low back pain comes in cycles. Don't be fooled! There are no quick fixes for conditions like obesity and depression, the reality is that there are no magical cure for low back pain.



•Remain active and avoid bed rest - Those who remain active (even when in pain) do better in the long-term. For recent onset low back pain, find a balance between letting the low back pain settle while still moving. Similar to a footballer who has twisted the ankle: avoiding aggravating movements and reducing training for a few days helps, but it is ensured that the ankle isn't rested completely to promote stiffness and weakness. During the first few days of back pain, it is common that back movement or posture can be significantly altered. This is a normal part of the back pain experience and is like limping after an ankle sprain.













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#NEWSOFTHEWEEK - by Liz Wright



•Return to usual activities — People are usually most worried about returning to activities involving lifting, impact, bending and twisting. Expect them to be sore initially, though gradually they will get easier. E.g. new runner - they have an increased risk of pain or injury if they start by running > 3x a week. This increased risk does not mean to give up running forever. They might just need to change some things: the amount they do, the way they do it, and give their body more time to get accustomed to this new activity. Exercise helps pain and reduced frequency of future episodes — best exercise is the one the person will stick to over time.



•Stay at work/get back as quickly as you can - Think again of the footballer with the sprained ankle. The footballer will modify or reduce training for a few days and gradually build up training but won't stop all activity. Sitting does not cause low back pain and no particular sitting posture has been found to cause low back pain so there is no scientific evidence behind the slouching advice. If you sit for 8 hours a day, focus on being active outside of work (1 hour) to reverse the potential negative effects of sitting.



•The person needs Rx not just a spine - Low back pain can be triggered by non-physical factors which are common in our lives also. These triggers can be psychological (thinking you will not get better, depression, stress, fear of movement), health related (being tired and run down, low energy), lifestyle related (sleep problems, low levels of physical activity, being overweight, smoking) or social (money problems, poor relationships or support at work or home, low job satisfaction, stressful life events like a death or illness).

#FRACTUREFRIDAY BY JESS MILLER

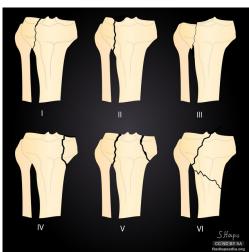
Tibial plateau fractures

Epidemiology

Most tibial plateau fractures will occur when an axial force is placed through the tibia e.g. if someone falls from a height. The pattern of fracture varies between younger and older patients; younger patients will generally have splitting fractures, whereas older patients (who may have osteoporosis) will have depression fractures.

Additional injury to surrounding knee ligaments occurs in approximately 10% of patients.

The lateral plateau is more commonly fractured than the medial plateau as the medial side requires a large amount of force. Medial plateau fractures are often seen in conjunction with lateral plateau fractures and other bones around the knee joint.



Imaging

CT and MRI are more helpful than plain radiograph to determine severity of the injury.

The Schatzker classification is used (see left).

Treatment

Not all fractures will require surgery. This is normally decided based on whether the fracture is displaced or non displaced, or whether other injuries are present (e.g. compartment syndrome, vascular injury).

References http://bit.ly/2H3arNW http://bit.ly/2EeblcM







