RAPID RESEARCH

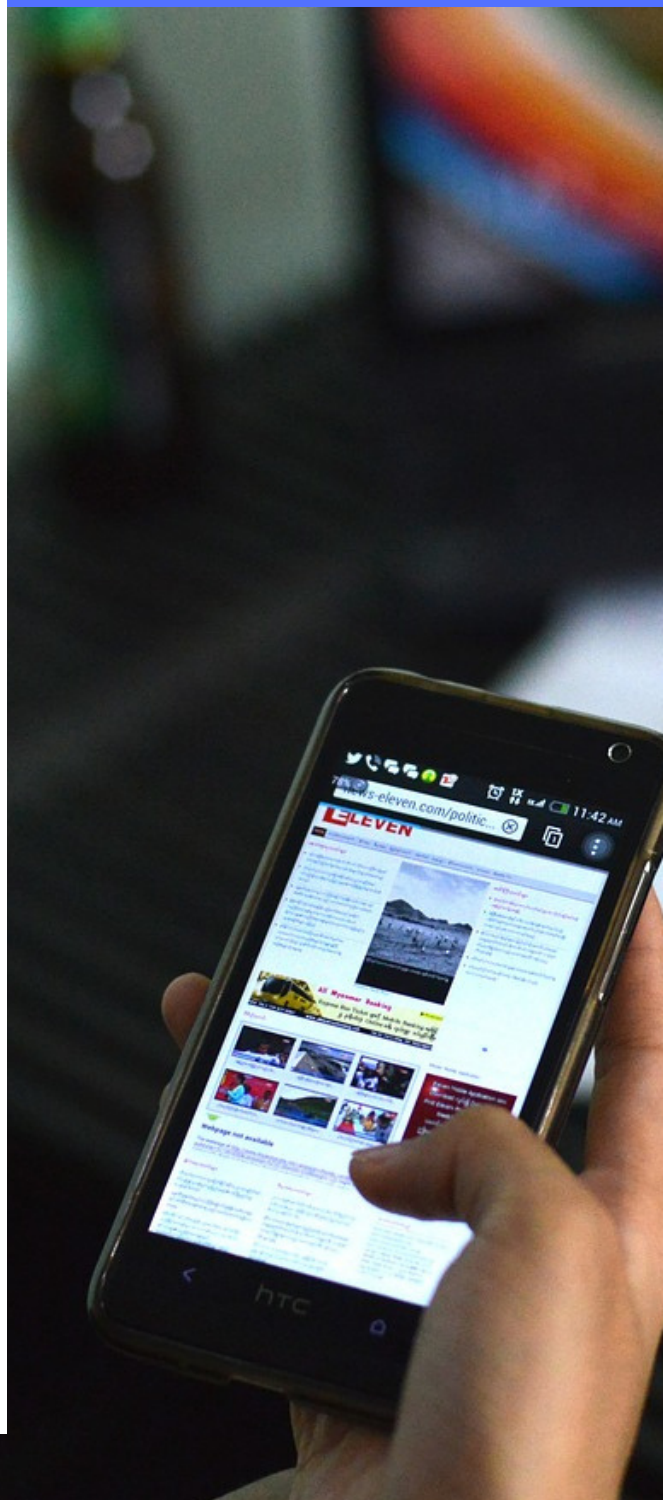
@physicaltherapyresearch

July 2022

Inside This Week:

Best Treatment: Achilles Tendinopathy

- Altered Strength Profiles in Achilles Tendinopathy
- Most Effective Treatment for Achilles Tendinopathy
- Injection Therapies for Achilles Tendinopathy



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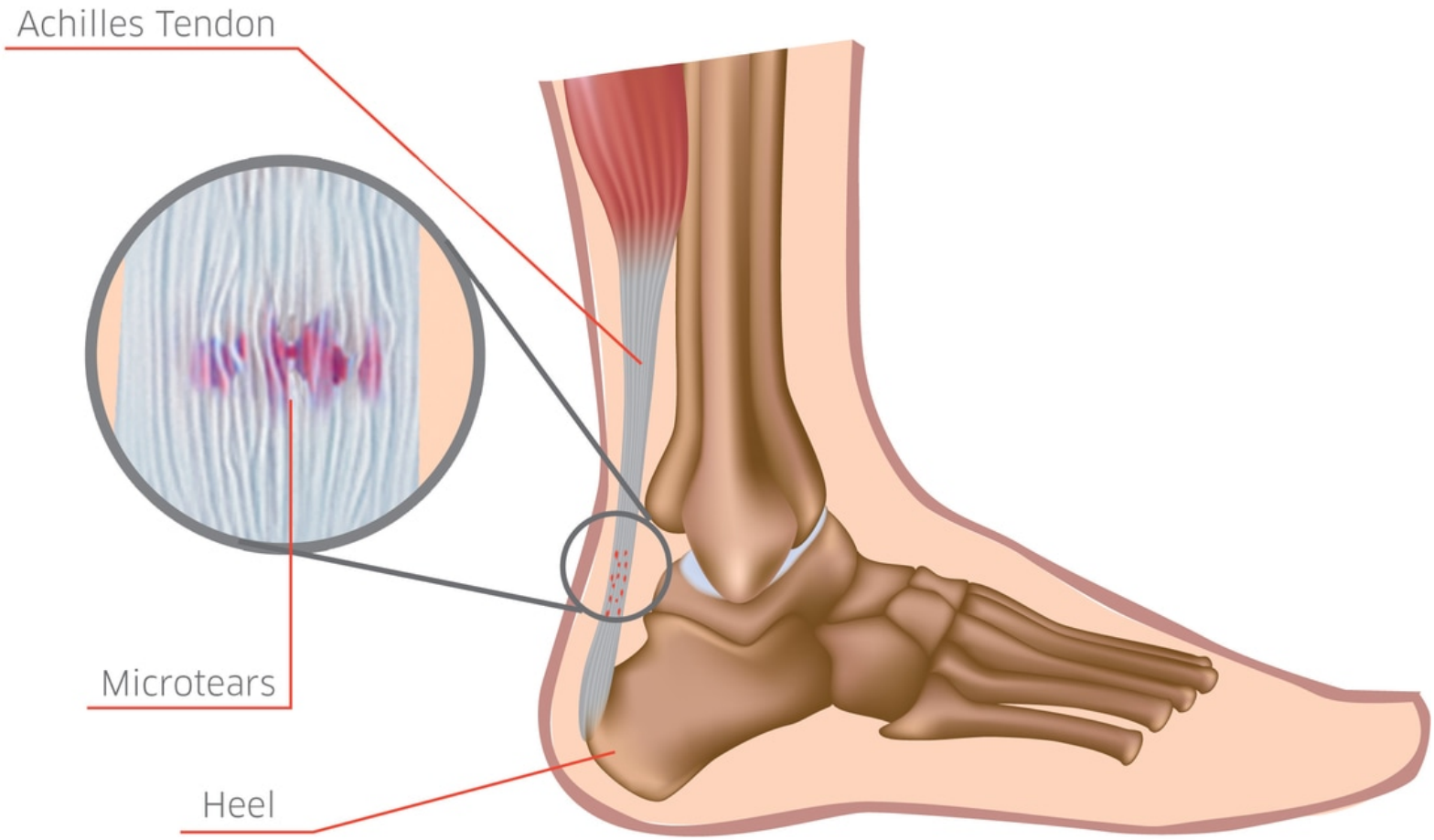
ALTERED STRENGTH PROFILES IN ACHILLES TENDINOPATHY

Click for Full Text (McAuliffe et al. 2019)

This systematic review evaluated and summarized the evidence regarding the plantar-flexor strength profile in individuals with Achilles Tendinopathy



KEY FINDINGS

19 studies included.

Meta-Analyses Findings:

Isokinetic dynamometry showed reductions in maximal strength for:

Concentric Slow Plantar Flexion Peak Torque **[44% deficit]**

Concentric Fast Plantar Flexion Peak Torque **[38% deficit]**

Eccentric Slow Plantar Flexion Peak Torque slow **[18% deficit]**

Reactive strength showed reductions in strength for:

Hopping **[16%–35% deficit]**

Explosive strength:

Reduced rate of force development **[10%–21% deficit]**

Ground Reaction Force:

Varied, but not consistently reduced or altered.

MAIN TAKEAWAYS

Individuals with Achilles Tendinopathy showed deficits in maximal, reactive, and explosive strength.

Current focus on maximal strength (Heel Raise Test) during assessments and rehab, with little emphasis on explosive or reactive strength, may not optimally match the entire strength spectrum.

This could explain why strengthening exercises are only moderately effective for reducing pain and disability in patients with Achilles tendinopathy.

MOST EFFECTIVE TREATMENT FOR ACHILLES TENDINOPATHY

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Click for Full Text (Van Der Vlist et al. 2019)

This systematic review & meta-analysis evaluated the comparative effectiveness of all available treatments for Achilles tendinopathy in a regularly updated ('living') systematic review using NMA.

KEY FINDINGS

29 trials included; 42 different treatments
22 trials (76%) were at high risk of bias
7 trials (24%) had low to moderate risk

86% of the trials included patients with mid-portion tendinopathy

Main Results:
At 3 Months:
Any treatment class was superior to wait-and-see
(very low to low certainty of evidence).

At 12 months:
Exercise therapy, exercise+injection therapy and exercise+night splint therapy were all comparable with injection therapy
(very low to low certainty).

MAIN TAKEAWAYS

No trials were at low risk of bias & most had only short follow-ups.

Active treatments were superior to wait-and-see at 3-month follow-ups.

No difference in effectiveness between different active treatments at 3-month and 12-month follow-up.

Wait-and-see is not recommended as all active treatments were found to be superior to it.

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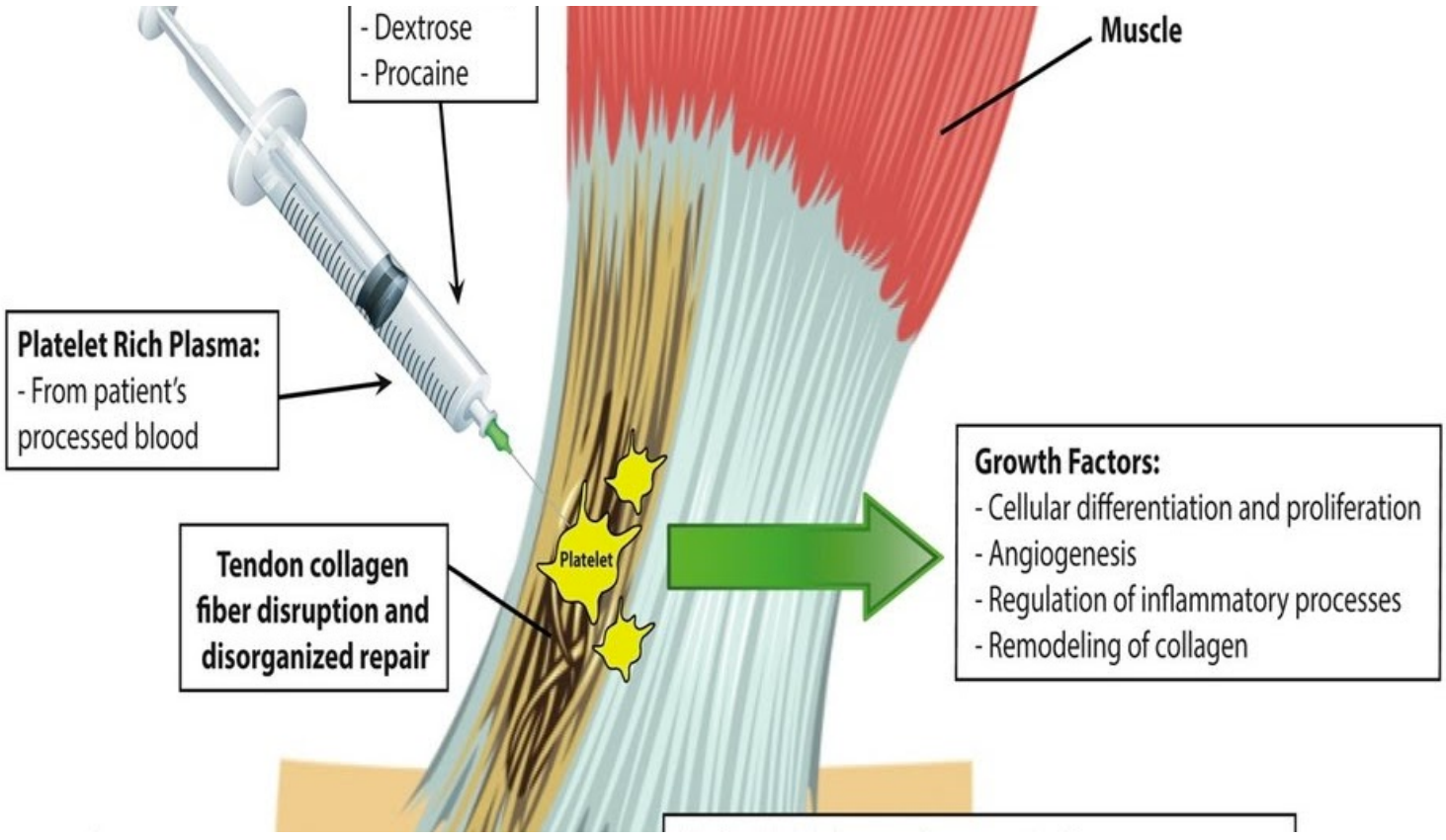
INJECTION THERAPIES FOR ACHILLES TENDINOPATHY

Click for Full Text (Kearney et al. 2015)

This systematic review assessed the effects (benefits and harms) of injection therapies for people with Achilles tendinopathy.



KEY FINDINGS

18 studies (732 participants).

No significant differences for function between injection therapy and control groups at 6wks, 3mo, or 6-12mo. (Low Quality Evidence)

Little significant difference for adverse events. (Very Low Quality Evidence)

Some **benefit for pain and return to sport** in short-term. (Very Low Quality Evidence).

Little difference between groups in patient satisfaction. (Very Low Quality Evidence)

There was insufficient evidence to conclude on subgroup differences based on mode of action.

MAIN TAKEAWAYS

There is insufficient evidence from randomized controlled trials to draw conclusions on the use of injection therapies for treating Achilles tendinopathy.

Use of injection therapies should be considered in research settings in the first instance to address this lack of evidence.

GIVE US YOUR FEEDBACK!

MEMBERS

We are on a mission to make research more accessible, easier to interpret, and quicker to implement.

Help us by giving 1 minute of your time to leave feedback for us.

We would greatly appreciate any feedback you have, as it helps us continually improve!

Leave Review