RAPID RESEARCH

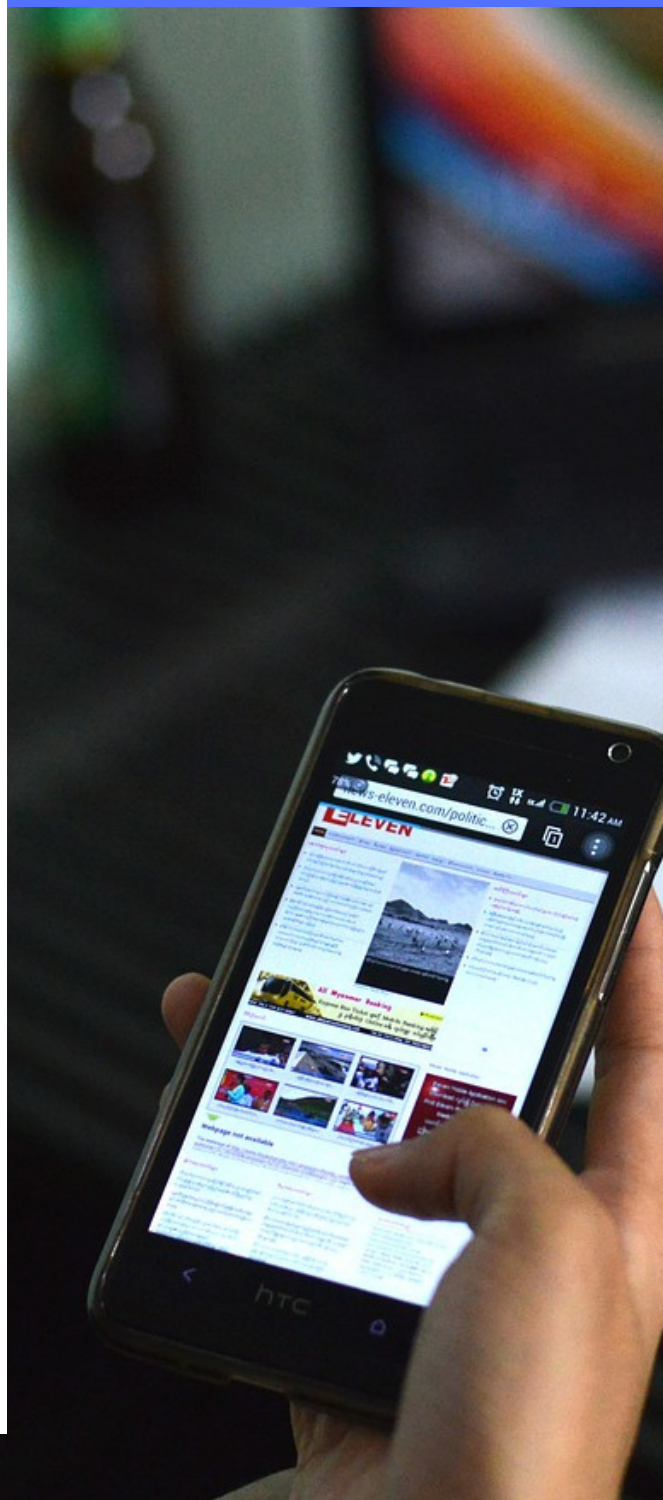
@physicaltherapyresearch

February 2022

Inside This Week:

Platelet Rich Plasma Injections

- PRP Injections for Knee Osteoarthritis
- PRP Injections for Degenerative Disc Disorder
- PRP for Sports Related Muscle, Tendon & Ligament Injuries

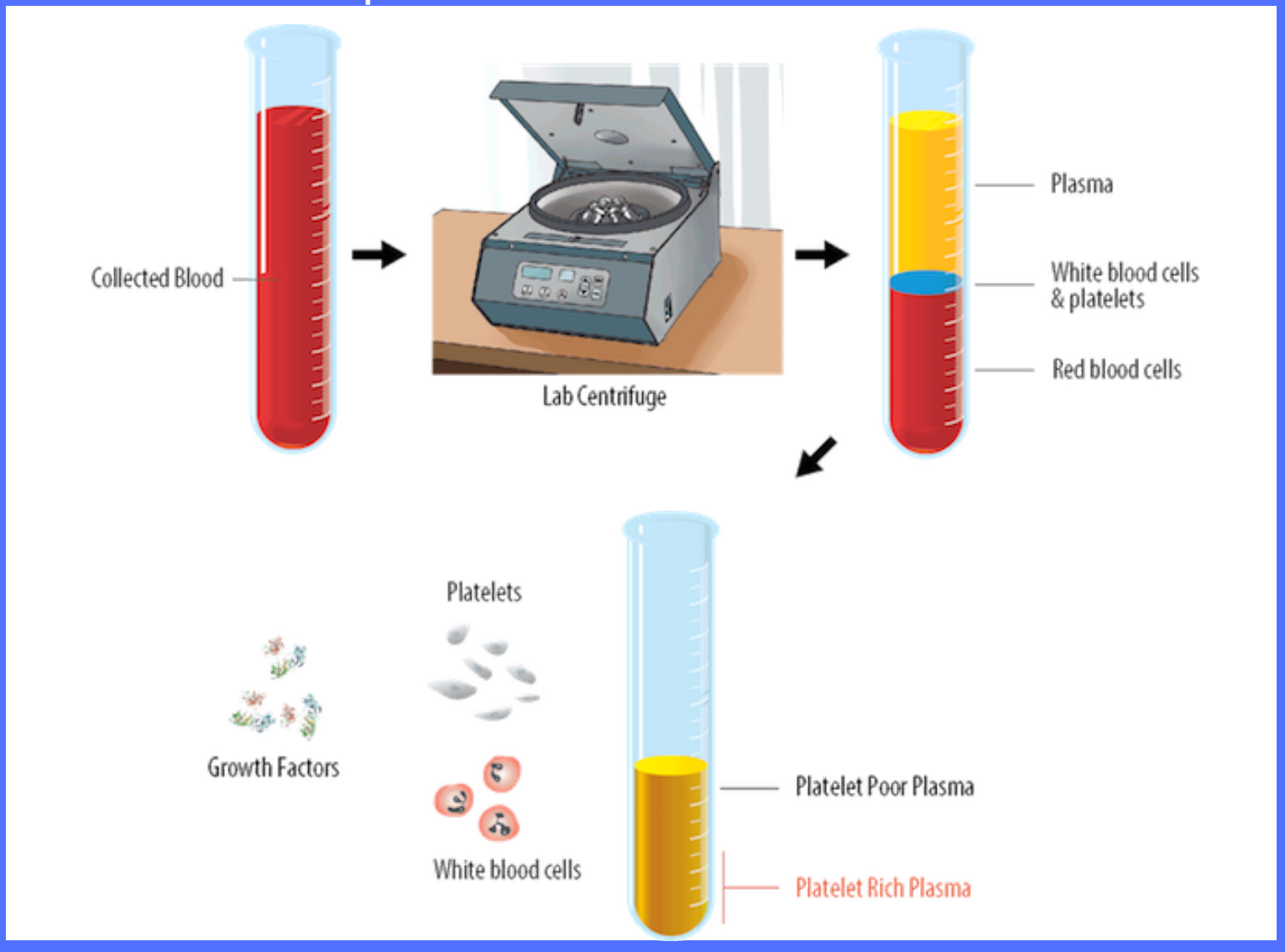


FEBRUARY 2022

PRP INJECTIONS FOR KNEE OSTEOARTHRITIS

Click for Full Text (Filardo et al 2021)

This meta-analysis evaluated the effectiveness of PRP compared with saline and other intra-articular treatments in knee OA patients in terms of patient-reported outcome measures.



KEY FINDINGS

34 RCTs; 1403 knees in PRP groups & 1426 in control groups

Primary outcome was the overall WOMAC score 6 and 12 months after the injections.

WOMAC score:
Favored PRP vs. placebo at 12-month follow-up.
Favored PRP vs. HA (hyaluronic acid) at 6&12-month follow-ups.

PRP vs Corticosteroid Injection:
Clinically significant **improvements for overall pain (VAS score).**
Knee Injury and Osteoarthritis Outcome Score **(KOOS) Improved for:**
Pain.
Function in daily activities.
Quality of life at 6-month follow-up.

Superiority of PRP did not reach the minimal clinically important difference for all outcomes.

Overall quality of evidence was low.

MAIN TAKEAWAYS

Based on the findings of this meta-analysis:
Effects of platelet concentrates goes beyond just placebo effect.

PRP injections can provide better results vs. other injection options.

This benefit increases over time, becoming clinically significant after 6 to 12 months.

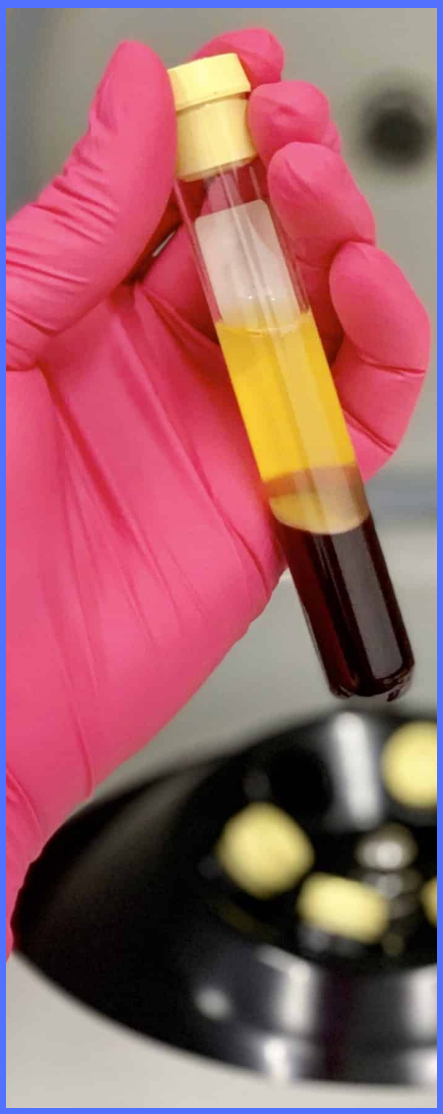
However, although clinically substantial, the **improvement remains partial and supported by low level of evidence.**

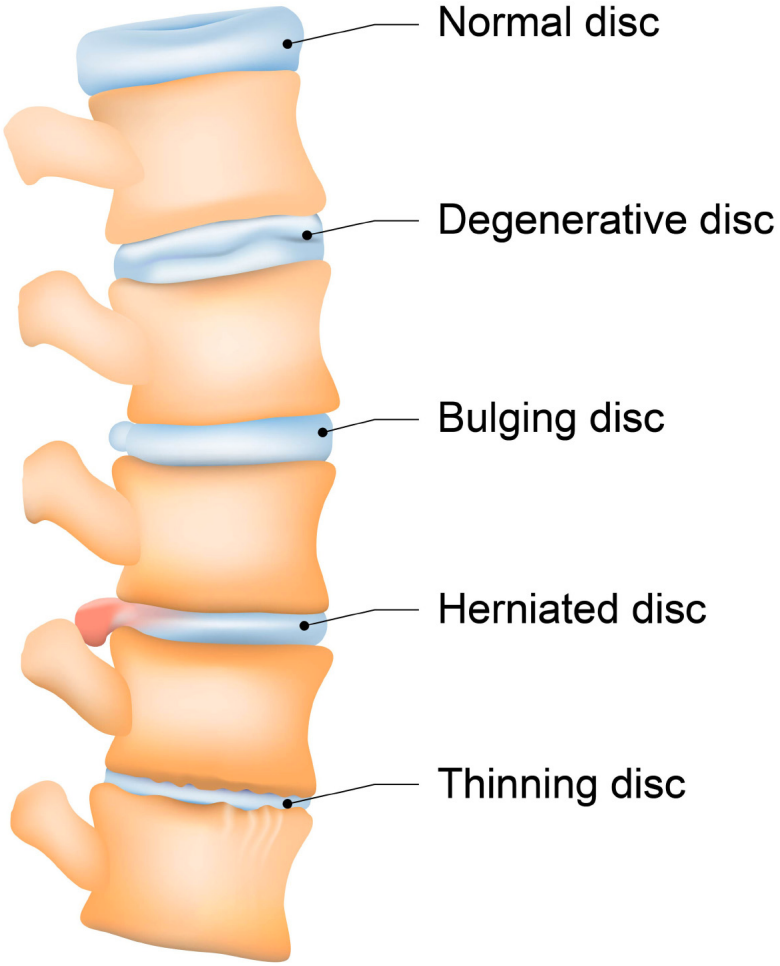
FEBRUARY 2022

PRP INJECTIONS FOR DEGENERATIVE DISC DISORDER

Click for Full Text (Tuakli-Wosornu, et al. 2016

This research investigated whether a single intra-disc injection of PRP would confer clinical benefit for individuals with chronic discogenic LBP.





KEY FINDINGS

47 Participants were randomized to receive **PRP or contrast agent** after provocative discography.

Pain, physical function, and participant satisfaction were assessed at 1 week, 4 weeks, 8 weeks, 6 months, and 1 year.

After 8wks, statistically significant improvements from PRP vs. Controls for:
Pain
Function
Patient satisfaction

No adverse events of disk space infection, neurologic injury, or progressive herniation were reported following the injection of PRP.

MAIN TAKEAWAYS

Participants who received intra-discal PRP experienced significantly greater improvements in Function, NRSeBest Pain, and NASS satisfaction scores compared with those who received contrast agent alone over 8 weeks.

Improvement in function score was sustained for up to 1 year or more

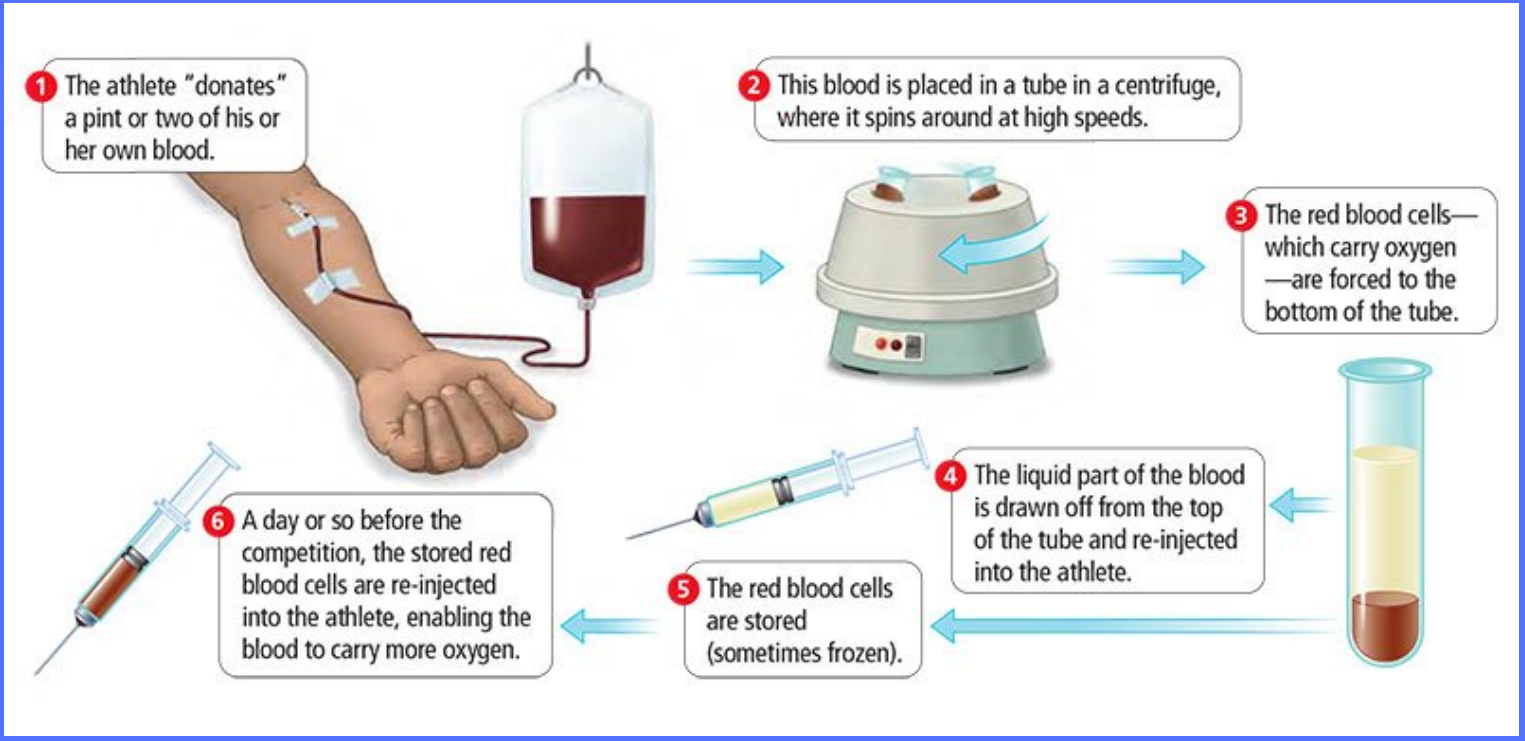
No reported complications after injection among enrolled participants.

FEBRUARY 2022

PRP FOR SPORTS RELATED MUSCLE, TENDON & LIGAMENT INJURIES

Click for Full Text (Cruciani et al. 2019)

This Umbrella Review provided a summary of the existing research syntheses related to PRP use for sports-related muscle, tendon and ligament injuries.



KEY FINDINGS

22 studies included;

5 evaluated PRP for acute muscle injury:

- **3 of 5** concluded that **PRP had no effect on the outcomes** considered.
- **1 of 5** shows **superior efficacy of rehab exercise** vs. PRP.
- **1 of 5** shows **PRP may result in an earlier return to sport** for acute grade I-II injury.

17 evaluated PRP for tendon and ligament injury:

- **8 of 17** show statistically **significant differences in pain and/or function outcome measures** favoring PRP vs. controls
- Most of the **observed differences were small.**
- **Adverse events & quality of life outcomes were rarely analyzed** or reported and were **clinically insignificant.**

MAIN TAKEAWAYS

Based on **low/very low quality evidence,** in the treatment of acute muscle injuries, **PRP does not seem to be superior to usual care.**

For tendon & ligament injuries, there is little evidence that favors PRP vs. controls.

Most of the observed differences were small and, even if statistically significant, are **unlikely to be of clinical significance.**

Overall, there is **currently insufficient evidence to support the use of PRP for treating these injuries.**

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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