

Clinical trial looks at impact of platelet-rich plasma therapy on tennis elbow

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A procedure intended to help heal musculoskeletal injuries called platelet-rich plasma therapy, or P.R.P., has created a big buzz in sports medicine and the media in recent years. Tiger Woods reportedly received the procedure for a sore knee and Pittsburgh Steelers' Hines Ward used it for a sprained knee ligament just before playing a key role in the team's 2009 Super Bowl victory.

However, the method – which involves concentrating the platelets in a patient's blood sample and re-injecting them into the injured area to boost the body's own healing powers – is expensive and rarely covered by insurance because it lacks scientific research to back it up.

Researchers at the University of Michigan are taking a step towards answering some questions about the therapy through a new clinical trial exploring how PRP specifically affects tennis elbow (or lateral epicondylitis). People with this condition experience pain from injury and degeneration in the tendon along the outside of the elbow, especially with extending the wrist. It can be caused by overuse or sports related repetitive strain.

"The popularity of PRP has moved faster than the science," says principal investigator Jon Jacobson, M.D., U-M Musculoskeletal Division Director and Professor of Radiology in the U-M Medical School. "Tennis elbow can be a debilitating condition, and the goal of the study is determine whether symptoms are improved in people who receive PRP injections compared to those who receive alternative and

much cheaper types of treatment."

Other treatments for [tennis elbow](#), such as corticosteroid injection, have shown little long-term success.

Researchers will compare the effects of [physical therapy](#) alone versus physical therapy in conjunction with either dry needle tendon fenestration (needling the tendon to make it bleed and to induce healing), re-injection of a patient's venous blood, or re-injection of the concentrated platelet-rich layer of a patient's own blood (PRP). This trial is unique in that it is a blind study (which means participants don't know which arm of the study they're in, preventing false positive experiences based on the placebo effect) to specifically compare PRP outcomes to other forms of treatment.

"PRP injection has emerged as a treatment alternative for many musculoskeletal conditions and recently been popularized by the media because of its use among well-known athletes – however it costs more than other options and success stories have yet to be properly grounded in science," Jacobson says.

"If we find that platelet rich plasma is better compared to the other treatments, it would justify the high cost and growing industry associated with the procedure."

More information: [clinicaltrials.gov/ct2/show/NC ...
=Jon+Jacobson&rank=4](https://clinicaltrials.gov/ct2/show/NC...=Jon+Jacobson&rank=4)

Provided by University of Michigan Health System

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