

Does platelet-rich plasma therapy lower risk of meniscus repair

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The use of platelet-rich plasma therapy can reduce the risk of a second meniscus failure after operation but does not seem to protect patients who have had surgery to repair an anterior cruciate ligament, according to research presented at the Annual Meeting of the American Orthopedic Society of Sports Medicine.

Platelet-rich plasma therapy involves the extraction of blood from the patient, which is then centrifuged to obtain a concentrated suspension of platelets. It then undergoes a two-stage centrifugation process to separate the solid and liquid components of the anticoagulated blood. PRP owes its therapeutic use to the [growth factors](#) released by the platelets which are claimed to possess multiple regenerative properties.

The meniscus is a piece of cartilage that acts as a [shock absorber](#) between the shinbone and thighbone.

Researchers at The Ohio State University in Columbus sought to determine whether intraoperative PRP affects meniscus repair failure risk and whether the effect of PRP on meniscus failure risk is influenced by ACL reconstruction status or by PRP preparation.

The researchers randomized 550 patients into two main groups: [patients](#) who underwent meniscus repair surgery with PRP and those who did not receive PRP therapy. Patients with concurrent ACL reconstruction were assessed for meniscus repair failure within three years.

Patients who did not receive PRP therapy experienced a meniscus failure rate of 17 percent while those who were given PRP had a 14.7 percent failure rate. The effect of PRP on meniscus failure risk was dependent on ACL injury status—those who had only a meniscus PRP was associated with a lower risk of failure but those with ACL surgery, PRP was not associated with a lower risk of failure.

"PRP preparations utilized in the current study had a substantial protective effect on isolated meniscus repair failure risk over three years," said Dr. Joshua Scott Everhart. "In the setting of concomitant ACL reconstruction, intraoperative PRP does not reduce meniscus [repair](#) failure risk."

More information: [www.sportsmed.org/aossmimis/me ...
AM2019-Abstracts.pdf](http://www.sportsmed.org/aossmimis/me...AM2019-Abstracts.pdf)

Provided by American Orthopaedic Society for Sports Medicine

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