

Platelet-Rich Plasma Holds Promise As Interventional Treatment



Jeff Pavell, DO
Chief of Rehabilitation
Medicine

In rehabilitation medicine, exercise and physical therapy are the gold standard when it comes to recovery. Many patients, however, now benefit from a variety of additional treatment modalities, said Jeff Pavell, DO, the chief of rehabilitation medicine at Englewood Health. Platelet-rich plasma (PRP), for instance, is a sought-after therapy among patients recovering from sports injuries or those working to ameliorate musculoskeletal problems.

PRP is an x-ray or ultrasound-guided interventional therapy that uses the patient's own growth factors and cytokines injected directly into the site of injury or pain. As Dr. Pavell explained, the therapy was initially used in conjunction with facial plastic surgery beginning in the 1980s. Physicians started experimenting with it to treat musculoskeletal issues in the late 1990s, and in just the past decade it has evolved into a viable tool for physiatrists and sports medicine specialists.

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"This area of regenerative medicine has seen the largest growth in our field, but it is an ingredient that is combined with the mainstays of spine and sports rehabilitation," Dr. Pavell said.

Candidates for PRP include patients of all ages with ligament and tendon conditions, such as tennis elbow, chronic strains of the medial collateral ligaments of the knee, rotator cuff syndromes and even plantar fasciitis. The PRP is injected directly into the problematic area of the patient's body.

Dr. Pavell explained that a minimal concentration of lidocaine is used for pain "so we don't dilute the working part of the injection." Patients can expect to experience some soreness in the days following treatment. "That almost seems like a sign that the procedure is working and creating an increased metabolic effect in the area," he said.

Studies are currently ongoing to support efficacy, Dr. Pavell said. Although current literature, such as one in *Current Reviews in Musculoskeletal Medicine* (2018;11:624-634), reports mixed results, Dr. Pavell has witnessed improvement in numerous patients following treatment.



Jeff Pavell, DO, the chief of rehabilitation medicine, demonstrates on a model how he uses ultrasound to guide injections.

"It is not a cure, but it certainly helps areas of the body heal more efficiently, and therefore allows patients to become more mobile," he said. "Once they become more mobile, they are able to use our other techniques, including strengthening and stretching, to further improve."

While in-person visits are now increasing in frequency, Dr. Pavell noted that, as a result of the pandemic, he started offering telehealth appointments, when appropriate, and found that the opportunity to see patients in their home environment was enormously valuable. "Being able to see where a patient lives, how many stairs they have, and what they have to do to, say, get their laundry is very helpful in assessing what their functional goals should be," he said.