Platelet-Rich Plasma: Does It Work?

A new study reports on the platelet-rich plasma (PRP) treatment and its use in sports medicine; cautions more investigation needed

ROSEMONT, Ill., Oct. 1 /PRNewswire-USNewswire/ -- Platelet -rich plasma (PRP) is currently used as an alternative treatment method for several common orthopaedic-related sports medicine conditions. According to a new study in the October issue of the Journal of the American Academy of Orthopaedic Surgeons (JAAOS), early outcomes of PRP appear promising; however, largerclinical studies are still needed to determine the benefits of its use.

"Some believe that PRP may catalyze the body's repair mechanisms at areas of injury, improve healing and shorten recovery time," said study co-author Michael Hall, MD, a senior orthopaedic surgery resident at the NYU Hospital for Joint Diseases in New York. "However, there currently is minimal evidence of this clinically and more research must be performed."

A Simple Process and Procedure

- Obtaining and utilizing PRP is a relatively simple process: a patient's own blood is placed into a centrifuge that rotates at high speed.
- This procedure separates the red blood cells from the platelets, which are blood cells that release growth factors that help the body heal itself.
- Next, the physician takes the platelet-rich portion of this blood (PRP) and injects it directly into the patient's injured area and the treatment is complete.

PRP Used Primarily for Chronic Conditions PRP treatments have been used for the past two decades to improve wound healing and bone grafting procedures by plastic and maxillofacial (mouth, jaw and neck) surgeons. It is only in recent years that orthopaedic surgeons and sports medicine specialists have utilized this technology.

PRP use in sports medicine primarily has been for the treatment of chronic tendon conditions, but also for acute muscle injuries and for the augmentation of tendon repair in the operating room.

The most common applications include:

- tennis elbow (lateral epicondylitis);
- Achilles tendonitis (inflammation and swelling of the Achilles tendon);
- patellar tendonitis (inflammation of the patellar tendon, also called

"Jumper's Knee"); and rotator cuff tendonopathy.

Should I Have PRP Treatment? According to Dr. Hall, PRP use has increased in recent years, and it has become a popular topic of discussion because the process is "simple, quick and relatively safe for patients."

"Use of PRP has increased, in large part due to new devices that enable fast preparation in the outpatient setting. A patient gives a blood sample and 30 minutes later can receive their injection," he explained. "There is always a risk of infection with any injection, and some have reported increased pain or inflammation at the injection site, but otherwise the risks with PRP appear minimal."

Questions to Ask Your Doctor Each patient and injury is unique; therefore it is important to discuss any treatment with an orthopaedic surgeon. If PRP treatment is recommended, Dr. Hall suggests asking your doctor the following to help determine if it is right for you:

1. What is your experience in administering PRP? (Precise placement of PRP injection into the area of injury is important for it to be effective, therefore physicians with more experience may be best.)

2. What are possible side effects? (Examples include increased pain or inflammation at the injection site.)

3. How many injections will I receive? (Several studies have reported using multiple injections, but the benefit of this is unknown.)

4. Will there be any restrictions? (Generally, patients are asked to avoid strenuous activity or sports for a short period of time after the injection to aid in the healing process.)

5. Will my insurance cover treatment? (Currently, most insurance companies do not cover treatment.)

Also, before embarking on PRP, Dr. Hall suggests trying conventional treatments, such as anti-inflammatory medications, physical therapy, massage, activity modification, bracing and even cortisone injections.

"The bottom line is that there are some studies indicating that PRP may be beneficial in the healing process. Does it really have a positive effect clinically? We don't know," said Dr. Hall. "The good news is that there are a tremendous amount of studies underway. Hopefully, in the next few years, we will be able to help determine the true benefit of PRP."

Source URL (retrieved on *05/25/2013 - 6:03am*):
http://www.surgicalproductsmag.com/news/2009/10/platelet-rich-plasma-does-it-work?qt-recent_content=0