Dr. Brooks' Instructions and What to Expect for PRP Injections:

Platelet-rich plasma is used in musculoskeletal medicine to focus your own body's ability to heal. It has several well-done published research trials (RCT) which demonstrate both its effectiveness and safety in many musculoskeletal conditions, including osteoarthritis, tendinopathies, partial tendon tears, and damaged vertebral discs. PRP has been in clinical use since the 1990's. Many people know that platelets form a clot if there is a cut in the skin. It turns out that platelets do not only form a clot, but they also start the body's own repair process. When platelets activate to form a clot, they release alpha granules and growth factors which have hundreds of chemical messengers in them that initiate and organize repair to the damaged tissue. Precisely placing PRP into the site of injury will initiate the healing process by activating the damaged cartilage, bone, or tendon. This is an inflammatory process, and inflammation is the vital first phase of healing.

What to expect and how to prepare for PRP:

• Depending on the procedure, you may need to arrange for a driver to bring you home (i.e. procedure on right/driving leg). IF you are having a lower extremity procedure, we can provide crutches as needed, but these are not routinely needed.

• **10 days prior** to the procedure: Stop taking anti-inflammatory drugs like Ibuprofen/Motrin, Advil, Naprosyn, Celebrex, or Meloxicam. Even aspirin should be stopped (but need to discuss this with Dr. Brooks and your cardiologist beforehand). Let Dr. Brooks know if you have been taking prednisone or other corticosteroids in the last 30 days as this can negatively interfere with the PRP process.

• The day before the procedure: thoroughly shower and clean your skin.

• The day of the procedure: Wear loose-fitting clothing like sweatpants or shorts. If you are having an upper body procedure wear a top that can button or zip up. **Please show up at least 15 minutes early** for your appointment, as we will need to take you back to draw your blood prior to the procedure.

• Things to avoid prior to procedure: tobacco/nicotine, alcohol, fatty foods. Tobacco is a potent toxin and its use constricts small blood vessels which are needed for tissue repair. Tobacco/nicotine use will limit the effectiveness of any treatment and stopping tobacco use is one of the single greatest actions you can take to improve your health. Avoid toxins like alcohol, which inhibits and depresses the cells needed for tissue repair.

PRP will initiate healing and a productive inflammation, and PRP therapy will make the body part treated sore for the first 3-4 days up to two weeks. Anti-inflammatory drugs (i.e. ibuprofen, Naprosyn, Celebrex) and corticosteroids such as prednisone can blunt or stop this process, so it is important to not take any anti-inflammatory drugs for 10 days before getting PRP therapy, and for at least two weeks after PRP therapy.

Depending on the body part injected, you may be in a sling or on crutches for several days. Most of the time these are not needed, but **it is important to allow time for the body part to rest after the injection**. By keeping the body part treated relaxed and not loading the body part the PRP can bind in place and do its job. If you push the body part too early, this may make the PRP less effective.

What happens during the PRP procedure?

Platelet rich plasma is made by taking some of your blood and performing a two-stage centrifuge process on it to concentrate the PRP. First, your blood is drawn into a syringe with a small amount of anti-coagulant in it (this is to keep the blood from clotting during this process). The amount of blood drawn is usually about 10-30 milliliters, depending on how much PRP is needed for the treatment. Then the blood is transferred in a sterile fashion into a centrifuge tube. It is then centrifuged for the first cycle where the red blood cells are isolated and discarded. In the second centrifuge cycle, the platelet-rich fraction of the remaining plasma is concentrated and placed in a syringe. The skin at the injection site is numbed with a small amount of topical cooling spray. Dr. Brooks will then precisely inject the PRP into the injury site using ultrasound guidance.

What to do <u>after</u> your procedure:

• NO anti-inflammatories (Ibuprofen/Motrin, Aleve, Meloxicam, etc.) for 2 weeks after injection. It is OK to use Tylenol only if needed. I can also prescribe you specific medicine to control any discomfort you may have after the procedure if needed.

• NO applying ice to the affected area for 2 weeks after the injection. It is OK to use heat.

• Rest the affected body part. By keeping the body part treated relaxed and not loading the body part the PRP can bind in place and do its job. Be sure to ask Dr. Brooks specific post-injection rest and guidelines to follow following your injection, as these will differ slightly depending on what type of PRP injection you receive. In general:

> • Allow **3-4 days** of rest from physical labor or repetitive activity for the affected body part. It is ok to move the area, but no lifting or strenuous activity. After 3 days, unless otherwise instructed, the treated body part should be used and slowly moved through its full range of motion. It will be sore, but you will not damage it by moving it, in fact it needs to move to heal.
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> • No strenuous activity, lifting weights, or dedicated therapy until the **2-week mark** from the injection. After 2 weeks from the injection, this is when it is most advantageous to start physical therapy.

• After two weeks, you may begin returning to activity, but it is a good idea to avoid activities that specifically hurt you before being treated. Exercise is vital to good health and finding a way to cross train around your injury is important not only for your physical health, but your mental health as well. Ask me about cross training options for your injury. Some brief (10 minutes or less) period of heat therapy will not hurt the rehab, but it is not required. Usually, depending on the initial injury, physical therapy is started from two weeks to three weeks after injection. Improvements in pain and function should be expected from **6 weeks to 12 weeks after injection** and some conditions may require more than one treatment.