

Platelet Rich Plasma

Platelet Rich Plasma (PRP) is made from your own blood. After drawing your blood, it is centrifuged to separate out the white blood cells (WBCs), red blood cells (RBCs) and most of the plasma. The result is highly concentrated amounts of platelets, which are important for healing. When activated, platelets release several proteins and peptides that aid in healing. With injuries that have not healed, your own inflammatory response, that aids in healing, is not occurring. The goal of injecting PRP is to stimulate your own body's inflammatory response again, to encourage your body to start the normal healing response.

DO NOT take any steroids or NSAIDS (nonsteroidal anti-inflammatory drugs) such as aleve, advil, motrin, ibuprofen, Naprosyn, Celebrex). Herbal anti-inflammatory medicines, such as Zyflamend, turmeric, bromelain (or other food enzymes), arnica, garlic capsules should also be stopped for 3 days before and 5 days after treatment. These medications prevent inflammation from occurring, thereby diminishing the benefit of PRP. Please contact Dr. Stebbing should you have any questions.

- Low dose aspirin (81 mg) is ok.
- Stop high dose fish oil (>600mg) for 3 days before. May resume the next day. 1 a day fish oil (300mg) is okay
- No PRP w/ Antibiotic use if prescribed for active infection or illness for < 7 days. Please reschedule.
- Coumadin (Warfarin) or other platelet inhibitor medications (Ticlid, Plavix, Effient, Brilinta) must be stopped for 2-3 days before treatment, with the permission of the prescribing physician.

PRE-INJECTION

1. Drink plenty of water 2 hours before your blood is drawn. The goal is to drink $\frac{1}{2}$ your body weight in ounces each day
2. Eat a no fat diet 12 hours before your blood is drawn. Avoid any food for 4 hours before procedure.

POST-INJECTION

Inflammation is expected after treatment with PRP. This can last 24 hours, but on occasion can last 4-7 days. Tylenol, tramadol, or other pain medications can be used. Numbness from the topical anesthetics usually resolves in 2-4 hours, during which time soreness, a bruised sensation, increased pain, and/or swelling occurs.

The following are suggestions that may optimize the benefit from the treatment:



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1. Do not use heat for the first 24-48 hours. Ice may be beneficial for no more than 15 min once or twice a day. (No ice w/ injections close to skin surface (i.e. knees, elbows, ankles, fingers). Avoid swimming or taking a bath for 24 hours.
2. For spine (thoracic, ribs, lumbar, sacral) injections, avoid sitting for a few days. Avoid twisting, heavy lifting, pushing/pulling for 3-4 wks.
3. For neck, thoracic, or arms injections, avoid weight bearing on hands, looking and reaching overhead for 4 days. Avoid overhead activities for 3-4 wks.
4. For lower extremities injections, use crutches to avoid weight bearing for 24 hours. Use of cane or crutch may be needed for 1-2 days or more depending on the degree of inflammation. Avoid overstressing the area for the next 3 weeks. At 12 weeks, normal full healing is expected, at which time gradual increase in activity recommended.
5. For upper extremities injections, use of a brace or sling for 24 hours is recommended. Use of the brace or sling may be needed for an additional 1-2 days. Avoid overstressing the area for the next 3 weeks. At 12 weeks, normal full healing expected at which time gradual increase in activity recommended.
6. Optimal results can be improved with appropriate nutritional support. This includes:
 - Multivitamin w/ Trace Minerals (chromium, zinc 50mg/day, manganese, copper, silicon, boron, molybdenum, magnesium, potassium)
 - Vitamin C 1000mg/day
 - Glucosamine Sulfate (with or without chondroitin) 2000mg/day
 - Vitamin D3 2000-5000 IU a day
 - MSM (elemental sulfur) 750mg twice a day
 - Increased protein intake. 5 small portions a day or every 3-4 hours a day.
 - Avoid all Trans fats (partially hydrogenated fats). These are found in many pre-packaged foods.
 - Fish Oil (ultra purified and concentrated) 700mg Omega 3. (goal 1500mg of EPA per day). HOLD 3 days before injections.
 - CoEnzyme Q 10 (Ubiquinol) 30-200mg twice a day IF you are on a STATIN.
7. Avoid high velocity manipulation by chiropractors or osteopathic physicians to the treated area for 2-3 months. Consider avoiding high velocity manipulations after treatment to the back, as this can be an injury pattern.

Good Quality Vitamins: There are two companies that I suggest using. Metagenic is a research company that produces high quality supplements. Their prices are higher, but so is the quality.

Vital Nutrients: www.vitalnutrients.net call 888-328-9992 use code 0520 get 10% discount w/ direct order. These are the products that I recommend with variations depending on the other medical issues:

General:

Multi-Nutrient 3(no copper, no iron). 1-3 a day

Vitamin C w/ Bioflavonoids 1-2 a day

Fish Oil 800mg 2-3 a day

Vitamin K2-7 + D3 (2000mg)

For Arthritis:

MSM 1000mg 2 a day (avoid in sulfa allergic)

Glucosamine 750mg 2-3 a day to reach 2000mg/day

Protein Powder:

ProWhey. It comes in a few different flavors. It is purely a protein powder

Metagenics: <https://jenniferstebbing.metagenics.com> You can order online and have free delivery. I have created lists on the website to help you figure out what to order. Metagenics is a research company. **(I would get fish oil from here, as well as the following products are well researched and have been shown to reduce full body inflammation.) Not everyone needs all of these, but for those with autoimmune diseases and other health issues, these products will help augment your healing.**

Fish Oil- OmegaGenics EPA-DHA 1000mg and/or SPM Active for patients with autoimmune disease, more severe arthritis, or other generalized inflammation (diabetes, heart disease) It is expensive but the research is really great for reversing the inflammatory process.

Inflavonoid Intensive Care or Inflanoid- mix of curcumin, fenugreek, polyphenols, Boswellia, ginger, which help with the body's response to the free radicals that interfere with healing and cause DNA damage. They are pro anti-oxidants and support the immune system. This is a great product for people who are aging, not healing, don't get enough vegetables and have pain.

UltraGI Replenish- This is a medical food. It is a vegan protein supplement, with all the vitamins and minerals that are recommended, and prebiotics, glutamine, omega 3, 6, and 9s, which heals the gut lining, allowing for absorption of your food and creating a healthy microbiome that is important for intestinal health, brain health and general well-being. It is more than the protein supplement above.