Dr. Ryan M. Siwiec Luke Dillon, PA-C 3100 Cross Creek Pkwy, Suite 200 Auburn Hills, MI 248.377.8000 www.drsiwiec.com





# Platelet Rich Plasma/Stem Cell Injections

\*\*Please note that the instructions provided below are general guidelines to be followed; however, any written or verbal instructions provided by Dr. Siwiec or Physician Assistant Luke Dillon supersede the instructions below and should be followed.

## When can I resume physical activity?

The most important part of any stem cell therapy is adhering to your post-procedure restrictions. For the procedure to have the best chance to yield lasting benefit, we strongly recommend:

- No anti-inflammatory medications for a minimum (preferred) 4 weeks
- Rest for the first 24–48 hours, but do not lie sedentary
- May Start Physical Therapy within 4-6 days

## **Recovery Summary**

In the early stages of recovery after injection (weeks 1–4), you may start with gentle myofascial release, kinesiology taping, gentle stretching, ROM, isometrics, and mat-based core stabilization exercises. Stationary bike, elliptical, and swimming are acceptable early in the recovery phase (Swimming should be avoided until incisions are healed). Avoid traction, heavy load or resistance, and NSAIDs the first four weeks of recovery. Ultrasound/STIM/TENS units are not suggested for therapy during this time.

In weeks 4–8, you can progress to more activity and gradually add more resistive load to workouts. This is a great time to incorporate core yoga, Reformer Pilates, TRX, and light weights, with a gradual increase in resistance (50–75% of pre-injection workouts). Avoid any forceful rotation or manual manipulation.

Remember that good healing during the first two months after the procedure will give you the best chance for success. Have your physical therapist call us with any questions.

In general, we always try to look at more than one injured part. As a result, it is likely we will recommend other types of conservative care to restore normal biomechanics. This might include physical therapy, gait/grip strengthening, different types of myofascial release, and specific home exercises.

Every case is unique and side effects differ for each person. Some patients may experience more pain and inflammation than others; please contact us if you have any questions or concerns. Certain joints and body areas can be more painful to inject, such as the ankles/thumbs/toes. Expect varying degrees of pain in the first few days after the procedure and treat with ice and prescribed medication if necessary. If your severe pain lasts for more than a few days, contact your provider for advice.

PRP/Stem-Cell Therapy

Physician Signature:

gnature: \_\_\_\_\_ Date: \_\_\_\_\_ For more orthopedic information and rehab protocols **visit www.drsiwiec.com**  Dr. Ryan M. Siwiec Luke Dillon, PA-C 3100 Cross Creek Pkwy, Suite 200 Auburn Hills, MI 248.377.8000 www.drsiwiec.com





## Weeks 1 & 2

Restrict yourself to light activity and the tasks of daily living. You will be sore, but it is better to move than to be completely sedentary. Use pain as your guideline. In the early weeks of regenerative healing, your body's natural inflammatory process will use cytokines, leukocytes, proteins, and inflammation to create a "scaffold" for the cells to bind to. The cells are just starting to form and divide, so you want to be very cautious and avoid overloading, shearing, or compression on the joint that was injected. Avoid too many frequent stairs, if possible (for hip and knee injections), and limit lifting to 5-10 pounds on occasion.

No running or weightlifting the first two weeks! Minimize load, compressive forces, and torque on the joints and discs. Range-of-motion and gentle stretching exercises are appropriate. Light and easy walking can be very helpful to minimize soreness for spine patients. Manage muscle soreness and spasms with heat (hot shower, heating pad) and inflammation from procedure with ice.

NO NSAIDS!! This includes but is not limited to Topical and/or Oral: Ibuprofen, Aleve, prescribed antiinflammatory medications, over the counter supplements such as: Turmeric/CBD/Arnica and/or natural "anti-inflammatory" remedies! You need your body's inflammatory process to help with healing. Walking in the pool is a nice way to get some motion; it can unload your joints and be soothing. You can get in the pool once your injection sites are healed. Use a kick board, buoy, or noodle for support in the water. Kinesiology tape or additional medication may be needed to help you manage your pain.

It is not uncommon to have increased soreness in your tissues and joints from the procedure. Mild to moderate pain is acceptable for a few days and this can last up to 2 weeks, but severe pain is not. If your pain becomes severe, or you cannot manage your pain with the above recommendations, contact us. (2 week follow up appointment needed)

## Weeks 3 & 4

Avoid repetitive loaded exercise, like stair steppers, running, or weightlifting. You may walk, use an exercise bike or elliptical machine, or swim/walk in the pool. These exercises have minimal compressive loading or pounding to joints. Keep all workouts to less than 50 percent of normal/pre-injection distance/weight/reps. Give the new stem cells time to implant themselves in the healing tissues. Proceed with caution; increase activity only within pain limits.

Our motto is: "If it hurts, don't do it!" Maintain normal range of motion in injected areas with gentle exercise. Yoga, stretching, mat Pilates, tai chi, and easy walking are perfect. Continue to manage inflammation with ice and pain medications as directed if needed. If pain persists and doesn't respond to other medications or treatments, you may start taking NSAIDS after fourth week, but avoid them if you can we prefer you wait until 6 weeks to restart. Contact our office if you are still having pain or difficulty with your healing.

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#### Weeks 5 & 6

Please be careful with jarring or compressive exercise and avoid shearing. No hiking on inclines or difficult, uneven terrain. Going up hills may feel fine but coming down is difficult for an unstable joint. Continue with core stabilization and joint stabilization exercises. You may start to increase resistance with weightlifting, but please still be cautious. Your PRP/stem cells are building new tissue and need oxygen/blood flow through gentle exercise but cannot tolerate being stressed by too much exercise. You may continue with stationary bike, elliptical, stretching, yoga, Pilates, and swimming exercise. Avoid compressive exercise such as overhead press, calf raises with weights on shoulders, squat rack, supine leg press, prone hamstring curls, twisting, repetitive flexion/extension, dead lifts, clean and jerks, kettle bells over shoulder level, box jumping, etc. If you still are experiencing pain, please back off on activity and continue to use ice. **(6 week follow up appointment needed)** 

#### Weeks 7 & 8

You may initiate light running exercise on even and soft terrain, a treadmill, or a track. As long as you're not having pain, you can slowly progress to your normal workout, but never to the point of pain in the injected area. Set yourself up for success by maintaining some aerobic capacity without injuring the new tissue. Avoid shearing or over compressive exercises. Continue to increase core and joint strengthening for optimal stabilization. Continue to use ice for pain and inflammation as needed.

#### Months 3-6

The **stem cells** are now at their peak of healing potential; help them heal you by not overdoing it. Walking, biking, yoga, stretching, and light-weights are appropriate. Be careful with distance running. Get yourself strong to support your joints. Continue to use caution with compressive activity, twisting, planting, and pivoting, overhead activity, and repetitive motion. Consider physical therapy if you need guidance on proper exercise to protect your joints and injection site(s) as you continue to heal. (3 month follow up appointment needed)