

# The “How To” Exercises for Different Treatment Areas.

## Intervertebral Disc Patients

Avoid overhead work if possible, for several months. This can put a lot of force on your regenerating new cells. You want to be careful and try to avoid compression with extension, repetitive flexion or twisting until your core is strong. Avoid compressive exercise such as overhead press, calf raises with weights on shoulders, squat rack, supine leg press, twisting, repetitive

flexion/extension, deadlifts, clean and jerks, kettlebells over shoulder level, box jumping, etc. *Highly recommended: core abdominal exercises; strengthen obliques, QLs, and gluteus medius, gentle spinal stabilization exercises; and stretching lower extremities and lower back for mobility. Pilates (mat and Reformer, chair), yoga and swimming are also appropriate.* Get yourself strong before you challenge your spine. Remember what got you to the point of seeking regenerative injection therapy. Most likely, you were in pain and your spine was weak.

## Shoulder Injury Patients

Avoid overhead and compressive work if possible, for two to three months. Don't play tennis or racquet sports with the injected side for six to eight weeks. Set yourself up for success. If swimming is part of your exercises, modify your stroke to avoid any painful movement. For example change your crawl to minimize any discomfort. This may be shortening your extension part of the crawl. Avoid shoulder/military press above head; no kettlebells over shoulder level during healing phase. Using the CoreCentric Movement Practice (CCMP) which emphasizes variable passive range of motion is one of the best rehab methods for new and degenerative injuries. Go to [prolomaui.com/patient information/regenerative exercise](http://prolomaui.com/patient-information/regenerative-exercise)

## Hip, Knee and Ankle Patients

Avoid compression activities such as running, jumping, squatting, supine leg press, or pivoting for two to three months to allow the regenerating cells to settle. Pain is your guideline. Walking, elliptical, swimming, yoga, Pilates and CCMP are ideal exercises early in the recovery stage. You may resume light running and short distance running, ideally on soft even terrain in weeks 6-8. Gradually increase your distance in weeks 8- 12. You may start easy hiking on level ground in week 8 as long as there is no pain or swelling. Consider some physical therapy to strengthen knees and hips, and to support the joints. Ideally, you should exercise to stabilize the entire lower extremity (hip, knee, and ankle).

## Golfers

No golf (except chip and putt) for two months. You have the rest of your life to play! Be very careful with rotational load on the spine. In the early stages of healing (weeks 1-8), you will want to work hard on increasing your core strength, especially abdominal obliques and QL muscles for spinal support with rotation. The CCMP is excellent for this.

For months 2-3: minimal golf (no more than nine holes, once a week) and avoid over-rotation of neck and spine. Let the regenerative cells and growth factors heal your joint. During months 4-5, slowly work up to a few nine-hole games per week. After six months, take the next few months to slowly progress to 18 holes. Work on your swing to abbreviate over-rotation. Consider some lessons.

with a golf pro to change bad habits with your swing. Remember, almost everyone on the PGA senior tour has had lumbar surgery. Avoid surgery by breaking into golf with gentle, short swings.

## Post-Procedure Ancillary Care

### Massage Therapy

You may have a massage the day before the procedure, but keep it gentle (Swedish). You may have another massage once the injection sites are healed (after five to seven days). Massage lotions/oils are not sterile, and you don't want to risk an infection. In the early recovery stages, gentle massage (like Swedish and effleurage) is appropriate. You may progress to deeper-tissue myofascial release after week 2, but gradually increase the pressure with the manual release. If the tissue around the injection site feels warm to the touch, is swollen or shows signs of infection, do not get a massage, instead call your doctor.

### Physical Therapy

In the early stages of recovery after injection (weeks 1-4), you may start with gentle myofascial release, kinesiology taping, TDN, ultrasound and TENS, gentle stretching, ROM, isometrics, and mat-based core stabilization exercises. Stationary bike, elliptical, and swimming are acceptable early in the recovery phase. Avoid traction, heavy load or resistance, compression to the spine, and NSAIDs the first few weeks of recovery. 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 injection will give you the best chance for success. The regenerating cells are fragile, and you need to be cautious that you don't overload them or cause too much stress or shearing on them.

### Chiropractic and Acupuncture Care

For disc injection patients you may seek chiropractic care for pain management in weeks 1-2, including manual release, ultrasound, electrical stimulation, and cold laser treatments. Absolutely no rotational or compressive adjustments should be performed. The discs may be weakened by the injection, and the injection site needs to heal.

In weeks 2-4 weeks, adjustments need to be low load, gentle, and non-forceful. A drop table or activator is OK. No spinal decompression or traction for four weeks. You don't want to increase intradiscal pressures while the tissues are healing. Once you start decompression, force must be low load, just to increase the flow of fluid and nutrients into the disc.

Ultrasound, electrical stimulation (TENS), cold laser, TDN or acupuncture, cupping, and gentle myofascial release are acceptable. Your chiropractor may call us with any questions at 808-575-2328

### Acupuncture

Acceptable any time but at least a few days after injection therapy. Better to have the treatment done to areas away from the injection site if the site is at all tender or sore.

## Personal Training

In the early stages of recovery (weeks 1-4), you may start with gentle stretching, Passive ROM, isometrics, planks, and mat-based core stabilization exercises. Stationary bike, elliptical, and swimming are acceptable early in the recovery phase. Avoid heavy loads or resistance, compression to the spine and joints, and NSAIDs the first few weeks of recovery. In weeks 4-8, you can progress to more activity and gradually add more resistive load to workouts, up to 50%-75% of pre- injection workouts. Avoid any forceful rotation, flexion, or extension moves. Remember that good healing during the first two months after injection will give you the best chance for success. The cells are fragile, and you need to be cautious that you don't overload them or cause too much stress or shearing on them. Avoid compressive exercises, such as overhead press, calf raises with weights on shoulders, squat rack, supine leg press, loaded twisting, repetitive flexion/extension, deadlifts, clean and jerks, kettlebells over- shoulder level, box jumping, etc. Highly recommended: core abdominal exercises; strengthen abdominal obliques; QL, and gluteus medius; gentle spinal stabilization exercises; and stretching lower extremities and lower back for mobility. Pilates (mat, Reformer, chair), yoga, and swimming are very appropriate. Again the **CoreCentric Movement Practice** will be invaluable in your recovery protocols. Please have your trainer call with any questions. 808-575-2328.

## About Arthritis

Many factors or variables can lead to cartilage or disc degeneration and arthritis. Some you can control and some you cannot. These include genetics and family history, aging, autoimmune disease, connective tissue disease, poor diet or malabsorption of nutrients, obesity, lack of exercise, decreased strength around the joints and spine, diabetes, rheumatoid arthritis and chronic inflammation, gout, hormone disorders, smoking, consuming alcohol, repetitive trauma, or a low-energy trauma that progresses over time. Chronic inflammation and micro-motion instability can produce ongoing pain and tissue breakdown.

Spinal discs and joint cartilage have a little or no blood inside of them, but still have live cells in the disc or joint space. They get their nutrition from diffusion and osmosis with motion, not through blood supply. Once the disc or cartilage tissue is damaged, cell nutrition is compromised, and the body cannot naturally heal the degeneration on its own. Degenerative discs are diagnosed with MRI and are often but not always painful. A painful degenerative disc is frequently 50% or more collapsed, and has cartilaginous endplate erosion. A healthy disc appears white or light grey, indicating fluid retention. A degenerated or desiccated disc will appear dark and have less volume or height. However, new regenerative cellular therapy uses your own mesenchymal stem cells to help your body repair these tissues and make your joints/spine healthier. It is imperative that you follow suggested guidelines during this repair phase to have the best outcome.

Arthritis and joint degeneration occur over time, and are often due to poor joint mechanics, poor body mechanics, bad posture, weakness, repetitive motion, high or compressive forces, and bad habits. Poor diet, weight gain, and other traumas can cause tissue and joint injury. Consider making lifestyle changes to eliminate factors that might put you at higher risk for joint/cartilage breakdown. You have come to Maui Regenerative Medicine for regenerative cellular therapy because you want to be healthy and get out of pain. Make the commitment to yourself and make the lifestyle changes that you can control, like diet and exercise, and get healthy!

Four goals to control arthritis:

1. Control pain and inflammation
2. Improve joint function
3. Maintain a healthy body weight
4. Achieve a healthy lifestyle with exercise and good nutrition

Tips to achieve these goals by changing your lifestyle: Consider a clean diet: low fats, lean protein, fresh fruits and vegetables, whole grains, low sugar/salt. Stay hydrated! Dehydration dries out connective tissue and discs. Get plenty of sleep and learn sleeping positions that can decrease stress on spine and joints. Good ergonomics for workspace and proper lifting techniques are important to reduce stress on your body. Consult a nutritionist or registered dietician for a weight loss program. Obesity is the No. 1 cause for degeneration and arthritis. Quit smoking! Smoking dries out your discs and connective tissue. Get strong! Build strength in the muscle that surrounds your painful joint. Strong muscles can absorb some of the shock that goes through the joint. Attend some physical therapy to learn proper exercises to support your joints.

Activity modification: Avoid repetitive lifting, twisting, rotation, and compressive exercise. Poor body mechanics and weakness on joints can accelerate degeneration. Aerobic exercise boosts blood flow and increases nutrition to your joints. Inactivity can make your joints more stiff and painful. Stretch every day! Stretching increases joint range of motion. The medical team and staff of Maui Regenerative Medicine want you to have the highest success with your treatment. Someone from our office will contact you from time to time to inquire about your recovery and answer your questions or concerns as you recover and resume activity. If you have unexpected pain or any questions, contact us at 808-575-2328.