

# Post BMAC Procedure Care

Thank you for trusting our team at Direct Orthopedic Care for your BMAC regenerative therapy! This guest care guide is designed to help ensure that your procedure is as effective as possible. Please follow all instructions, and call us with any questions you may have.

### General Post-Procedure Acceptable Activities Instructions

With regenerative therapy, healing is a marathon - not a sprint. Following our recommendations will help to ensure proper healing takes place, so that your treatment is as effective as possible. The injected cells of your procedure are fragile, as are the surrounding tissues. Overload on the treated area can cause the healing process to be delayed or ineffective. Please allow time for the healing process to take place, so the cells repair your injured/damaged joints or discs. While these cells are young and building new tissue, they do not tolerate stress well.

Since each person is unique, you may experience more pain, swelling, and inflammation than others. Additionally, certain areas may be more painful after injections, including the ankles and spinal discs. This is normal. However, for severe pain that lasts for more than a few days that does not respond to the treatments recommended below, please call to let us know so we can help.

#### Weeks 1 & 2 After Injections:

#### Activity

After your injection, it is wise to be as conservative as possible in your approach to activity.

#### Activities to Avoid

To optimize treatment outcomes, we recom-mend you avoid high-impact activities, including exercise for the first four weeks after your procedure. Avoid running during the first 5 weeks as well as lifting anything over five pounds and any other activity that causes compression, heavy loads, or torque on your joints, especially in the treated area. Avoid stairs whenever possible, especially if your injection[s] was in the lower limbs. The injected cells and the surrounding tissues are very delicate and the body needs time to heal. Too much activity can cause further injury and destroy delicate stem cells. Maintaining blood flow and circulation to the injection site are essential, so it is important to stay mobile. Light walking and stretching can help reduce or eliminate muscle sore-ness. After the injection site has healed, you may prefer light activity in a pool, as it helps reduce the load on your joints.

Pain can be an indicator that you have overexerted and need to decrease activity. Listen to your body and be protective, especially of the treated area.

## Swelling / Inflammation & Pain Management

You may experience swelling and/or inflammation at the site of injection, as well as the site of your BMAC extraction (hip). Your body's natural response to injections is to create inflammation, which stimulates the produc-tion of leukocytes, cytokines, and proteins that allow cells to heal the area. This may cause discomfort or pain, though symptoms typically subside within one to two weeks. During the first two weeks, we recommend acetaminophen [Tylenol] to relieve pain.

After the first two weeks, you may alternate heat and ice in 20-minute intervals as needed throughout the day to help manage pain and muscle soreness. Heat alone can help eliminate muscle spasms and soreness, and you may find a hot shower or heating pad works well. Icing helps to alleviate inflammation.

Topical analgesics like Biofreeze should be avoided. However, kinesiology tape (KT) or other therapies including ultrasound, cold laser, electrical stimulation with a TENS unit, and compression braces may be used to help manage pain. Only wear compression devices during activity and remove when you are sedentary.

Please avoid using over-the-counter, anti-inflammatory medications other than acetaminophen for four weeks after your injections. Medications, such as Ibuprofen, Advil, Aleve, etc., may decrease the efficacy of cell injections, as they potentially inhibit the production of cellular proteins that assist in the function of the new cells.

Likewise, prescription anti-inflammatory medications like Diclofenac or Pennsaid, should be avoided. The body's natural inflammatory response is working with the stem cells to help heal the injured area, and anti-inflammatories diminish your body's ability to do so.

Chiropractic care should be avoided for the first four weeks.

#### If your pain becomes severe, comes on suddenly, or is not alleviated with any of the above methods, please call our office immediately. Our doctors may recommend physical therapy to provide

recommend physical therapy to provide pain relief.

#### Weeks 3 & 4 After Injections: Activity

You may increase activity now, but keep it to 50% of your pre-treatment activity level. If movement becomes painful, reduce activity. Repetitive load exercises, including running and weight lifting should still be avoided.

Stretching exercises, including yoga, tai chi, and mat Pilates, as well as swimming or walking in the pool are appropriate for most people at this time. You may use pool noodles, kick boards, and other items in the water for support. You may also walk on a treadmill and use an elliptical machine or exercise bike to build strength and endurance.

#### Pain Management

Continue with pain relievers, including acetaminophen, topical creams, electrical stimulation, etc. mentioned above, if needed.

Massage and physical therapy can be introduced to help with pain management. Our physical therapists at DOC are experienced in treating guests and can recommend exercises that protect the body as you continue to heal. After week four, you may begin or resume chiropractic care with use of a drop table or activator. Low-load spinal decompression is acceptable at this time.

#### Weeks 5 & 6 After Injections:

#### Activity

Continue with activities listed above, including yoga and swimming, and begin to increase slowly. You may work up to 75% of your pre-injection activity levels. You may add resistance training as well to help strengthen muscles, but avoid exercises that cause compression. This includes, but is not limited to, supine leg presses, deadlifts, kettlebells above the shoulders, overhead presses, etc.

For runners, a return to light running is now appropriate. Runners and walkers should remain on soft, even ground if exercising outdoors. Stressing the joints by moving on uneven terrain can cause injury and/or impede the healing process.

#### Pain Management

You may continue with pain relievers, including acetaminophen, topical creams, electrical stimulation, etc. as mentioned above, if needed. If pain becomes severe or does not respond to treatment, please contact your DOC provider.

#### Weeks 7 & 8 After Injections:

#### Activity

Around this time, you may progress to your pre-injection activity level. Be mindful to stay within your limits, and if pain occurs please reduce activity. Continue to avoid exercises that compress the joints. Work on core strengthening exercises, including Pilates, as well as joint strengthening exercises for stabilization and healing.

#### Pain Management

You may continue with the methods above, and call if pain does not respond to treatment.

#### Weeks 8-16 After Injections: Activity

You new regenerative cells are now at peak healing potential. Maintain caution with repetitive motion, compressive activities, distance running, and other strenuous activity. Continue at your previous activity level, and slowly increase as the body allows. Remember, overexertion not only does not improve your results, it can hinder them.

#### Pain Management

We highly recommend utilizing physical therapy at DOC to help manage pain and accelerate the healing process. At this time, if you are still experiencing pain on a regular basis, please call our office to schedule an appointment.

# Specific Care Instructions for Certain Populations:

#### Shoulder Guests

Our physical therapists can assign postural stabilization and rotator cuff stabilization exercises as needed. Guests with BMAC injections in the shoulder(s) should avoid tennis and other repetitive motion activities on the affected side. Avoid all activities that require lifting the arms above shoulder height for eight to 12 weeks, including kettlebells, military presses, etc.

#### Golfers

Physical therapy and massage therapy are highly recommended to help manage pain. Our PTs can recommend specific exercises that will help strengthen and stabilize your joints from the shoulders down to your ankles. Core strengthening and spinal exercises are also recommended during your recovery.

Other than chip and putt, you should avoid golfing for eight weeks after your injection(s). During this time, work on strengthening the core to help support the spine. In the month following, you may resume minimal golf, being mindful to avoid over-rotating the spine. Please avoid golfing more than nine holes per week for weeks 4-12, and use gentle, short swings. Weeks 13-20, you may work up to several nine-hole games per week, after which you may slowly work up to 18hole games.

#### Hip, Knee, and Ankle Guests

Our physical therapists (PTs) can assign joint stabilization exercises based on your injection site as needed. During the first few weeks after your injection(s), you may participate in activities such as indoor walking, swimming, yoga, Pilates, and use of an elliptical machine. After week six, you may resume running, but only light and short distance on even, soft terrain. Increase your distance and speed slowly over the next six weeks, as your body allows. After week eight, you may resume hiking. If you experience pain and/or swelling, please back off activity and resume more slowly.

### Ancillary Care to Complement / Accelerate Healing:

You may use additional healing methods during your recovery, including physical therapy, to complement/aid in healing.

#### Physical Therapy

Physical therapy at DOC is highly recommended to all regenerative medicine/BMAC guests over the course of your recovery. Your PT will guide you through appropriate exercises, such as, stretching, isometrics, and core stabilization exercises, gradually increasing your movement as you regain strength and stability. During your visits, your PT may use a variety of healing methods, such as ultrasound, electrical stimulation with TENS, KT, and myofascial release. Congratulations on taking a step toward a healthier you! Our medical team at Direct Orthopedic Care wishes you a healthy and quick recovery. If you have any questions, please do not hesitate to contact your preferred DOC office anytime. In the event of an emergency, please call 911 or go to the nearest emergency room.

*Kind regards, Our Team at Direct Orthopedic Care* 







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