
BONE MARROW CONCENTRATE (BMC) – PATIENT GUIDE

You have elected to proceed with a bone marrow concentrate (BMC) injection. Bone marrow will be aspirated from your bone and concentrated. The bone marrow concentrate will then be injected into your problem site.

Please stop any prescription or over the counter anti-inflammatory medicines such as Aspirin, Motrin, Advil, Ibuprofen, Aleve, Naprosyn, Naproxen, Voltaren, Diclofenac, Meloxicam, Mobic, Celebrex, for 7 days- prior to the procedure.

If you are taking blood thinners like Aspirin, Plavix, Xarelto, Eliquis, or Savaysa for cardiovascular conditions, you must first consult with your prescribing physician to stop them before the procedure. In general, we follow these guidelines:

- Plavix® - Stop for 7 days prior to appointment (you will need clearance from your cardiologist if you have cardiac stents in place).
- Coumadin® - Stop 5 days prior to appointment with an INR drawn the day before your appointment.
- Aggrenox® - Stop 7 days prior to your appointment.
- Lovenox® - Stop 24 hours prior to your appointment.
- Xarelto® - Stop 3 days prior to your appointment.

Prednisone or any other oral or inhaled corticosteroid medications must be discontinued 4 weeks prior to and 4 weeks after any of these procedures. Please consult with your prescribing physician ensure it is safe to stop them.

Local anesthesia will be used to perform the bone marrow aspirate portion of the procedure. Since the typical local anesthetics can disrupt the cells in the bone marrow, we will not be able to use local anesthesia for the injection. Cold spray will be applied to numb the superficial skin. Depending on the affected area that is being injected, the pain from the injection itself can vary greatly. Tendon injections are typically the most painful, followed by muscle and joint injections. Please request pain medication if desired.

PHYSICAL THERAPY:

It is recommended that you start physical therapy within 1-2 weeks from your injection. Please schedule your appointment ahead of your procedure.

RESTRICTIONS:

Depending on the affected area that is being injected different restrictions will be imposed.

- A driver is required the day of the procedure
- Ensure to discuss with your employer potential for time off work or modified duty
- Medical Equipment Needed

- | | | | |
|------------------------------------|---|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> Crutches | <input type="checkbox"/> Shoulder Sling | <input type="checkbox"/> Elbow brace | <input type="checkbox"/> Wrist Brace |
| <input type="checkbox"/> Hip Brace | <input type="checkbox"/> Knee Brace | <input type="checkbox"/> CAM Boot | <input type="checkbox"/> Walker |

BMC POST-INJECTION INSTRUCTIONS

Your procedure sites will be sore for the first 1-2 weeks. Some patients can get a post injection flare up of moderate to severe pain due activation of the immune system. This is a normal reaction and typically improves within 1-2 weeks. Tendon injections are typically the most painful, followed by muscle and joint injections.

PAIN MEDICATION:

- After 72 hours, you can apply ice to the injection site for 10-15 minutes, 3 – 4 times a day for localized pain. Do not use heat until you are seen in follow up. It is ok to use ice over the bone marrow aspiration site right away, 15 minutes, 3 – 4 times a day for localized pain. Monitor for skin changes as the ice can harm the skin with prolonged exposure.
- For minor discomfort, Tylenol or Extra Strength Tylenol, not in excess of two tablets four times per day, may be used. Avoid any prescription or over the counter anti-inflammatory medicines such as Aspirin, Motrin, Advil, Ibuprofen, Aleve, Naprosyn, Naproxen, Voltaren, Diclofenac, Meloxicam, Mobic, Celebrex, for 14 days- after the procedure. Avoid prednisone for 4 weeks after the procedure.
- Pain medication prescribed by Dr. Panero may be taken as directed for discomfort not relieved by non-prescription medication. Do not drive or operate heavy machinery when taking narcotic pain medication.

ACTIVITY / DIET:

- You may be up and around as tolerated by your level of comfort; however, plan to take it easy the remainder of today.
- You may eat and drink as you desire.
- Do not drive for the remainder of the day.
- Do not take a tub bath or soak in water (i.e. pool, hot tub) for 5 days after the procedure.

WOUND CARE:

Do not go swimming or soak in a pool, bathtub, lake, or Jacuzzi for 2 weeks after the procedure.

Keep the **bone marrow aspiration** site clean and dry. You can remove the dressing 48 hours after the procedure. The steri-strips will fall off on their own over a period of 2-3 weeks.

Keep the **injection site** clean and dry. You can remove the band aid within 12 hours.

You can shower 48 hours after the procedure. Do not scrub directly over your incisions and gently pat the incisions dry after showering.

WEIGHT BEARING STATUS:

- Non-Weight Bearing for _____ days/ weeks. Then;
- Partial Weight Bearing for _____ days/ weeks. Then;
- Weight Bearing As Tolerated.

ACTIVITY MODIFICATION:

- As Tolerated
- No High Impact Activities (running, jumping) for _____ week/s
- No gripping, pulling, overhead, repetitive use activities for _____ week/s
- Full Rest for _____ week/s
- Light Duty at work
- Other: _____

RESTRICTIONS:

Shoulder:

- Wear the shoulder sling for _____ days / weeks

Hand / Elbow:

- Wear wrist splint for _____ weeks

Hip Joint:

- Use the hip unloader brace for 4-6 weeks.

Knee Joint:

- Use the knee compartment unloader brace for 4-6 weeks.

Patellar Tendon:

- Wear the knee Immobilizer Brace locked at _____ degrees for _____ days/ weeks.
Then;
- Wear the knee Immobilizer Brace locked at _____ degrees for _____ days/ weeks.
Then;
- Wear the knee Immobilizer Brace locked at _____ degrees for _____ days/ weeks.
Then discontinue.

Foot & Ankle:

- Wear the CAM Boot for _____ weeks

Follow up in: _____ weeks

RARE POST-PROCEDURAL SYMPTOMS

You should be alert to report any signs of infection. You should call us immediately if any of the following occur:

- If you experience any swelling, redness, bleeding or discharge from the site of the injection.
- If you have a fever greater than 100 degrees Fahrenheit.
- Any other symptoms of concern.

Call 916-732-3000 if any worsening of pain, swelling, redness, fever, or other signs of infection. Seek urgent medical care if staff unavailable.