BONE & JOINT
CENTER
Orthopaedic Excellence. Exceptional Care.

BMAC (Bone Marrow Aspirate Concentrate) Stem Cell Treatment
Frequently Asked Questions

What is BMAC and how does it work?
Bone marrow aspirate concentrate is a preparation of your own bone marrow that is spun in a centrifuge and concentrated. The bone marrow is harvested from a bone in your pelvis (back of the hip) under local anesthesia with lidocaine and ultrasound guidance. The marrow is combined with an anticoagulant to keep it from clotting. It is then spun in a FDA-approved centrifuge to concentrate the stem cells. Stem cells work directly at the site of injury or degenerative tissue to repair and heal the damage.

How is BMAC delivered to the injured area?
The doctor will use ultrasound or fluoroscopy to provide guidance in injecting the BMAC into the injured area which may be a joint, tendon, ligament, muscle, or nerve.

What can be treated with BMAC?
Many soft tissue injuries and degenerative or arthritic conditions can be helped with BMAC. Chronic joint pains and arthritis as well as chronic tendinitis are often targeted. The success depends on many factors which should be discussed with your doctor.

Does BMAC regrow cartilage?
Studies show promising results regarding cartilage regeneration, however this has not been proven in convincing human studies.

Is BMAC covered by insurance?
Most insurances do not cover BMAC injections as they still consider them experimental. You should check with your individual insurance company regarding coverage. We charge approximately $3000-$3500 depending on the area treated.

Is there anything that can prevent me from being a candidate for BMAC?
Individuals with anemia, low platelet counts, abnormal platelet function, ongoing or recurrent infections may not be able to have BMAC. If you are currently undergoing treatment for cancer or are pregnant or breastfeeding, you should discuss your situation with your physician and medical care team.
What can be done to prepare for my BMAC injection?
We recommend a balanced diet, low in fat and high in protein as well as lots of water leading up to the procedure. You should avoid NSAIDS (non-steroidal anti-inflammatory medications) for 5 days prior and 4-6 weeks after. On the day of injection, wear comfortable clothing and bring a driver to drive you home after the procedure.

Is the procedure painful?
The marrow harvest procedure is performed under local anesthesia with lidocaine. Ice and pressure are applied after the procedure. Most patients experience a few days of pain after the procedure that is usually easily managed with heat and acetaminophen or a prescription pain medication that your doctor will prescribe after the procedure. The harvest site for the bone marrow is recommended to keep covered and avoid submersion for 48 hours. Ice can help with the pain. If nerves and anxiety prior to the procedure is a problem, the doctor will offer to treat you with anti-anxiety medicine before the procedure. Please request this at least a week in advance.

How long before I can resume activity?
Usually activity can slowly resume after 2-3 days. Normal daily activity can begin with less pain at this time. Exercise can slowly resume at 2 weeks, cutting your distance and time by 50%. If you experience pain, please stop.

Will I be able to go to work/school after treatment?
Most patients are able to return to school or work the next day after treatment. Occasionally, we recommend you take off a day or two. Everyone is different and reaction to the treatment can vary.

Are there adverse effects?
BMAC is quite safe and the main drawback is post-procedure discomfort. Occasionally, a patient may experience a mild fever, swelling of the injected area, body aches, and fatigue for up to 3 days. If you are concerned about a symptom, please call!

How many treatments will I need?
Our goal is 80-90% improvement in pain and function. We attempt to do this with as few injections as possible, but depends on the severity of the problem. We often will inject PRP (platelet-rich plasma) with the BMAC at the same time. Occasionally, a PRP injection can be performed 8-12 weeks later, acting as a "booster" for further healing. This can be discussed with your doctor.

How long is the healing process?
We hope to see improvement at 6 weeks. Damaged or abnormal collagen (connective tissue) takes 9-12 months to completely heal.

If you have any additional questions about the procedure, please do not hesitate to call us!

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