

Dr. Erik Bruce



Dr. Bruce completed his undergraduate and medical degree at Tulane University in New Orleans, Louisiana. Dr. Bruce completed his orthopaedic residency at Tulane University as well. He then completed a fellowship in sports medicine with Dr. Michael Brunet.

Dr. Bruce is board certified by the American Board of Orthopaedic Surgery. He is a member of the American Academy of Orthopaedic Surgeons, American Orthopaedic Society for Sports Medicine, Texas Medical Association, Texas Orthopaedic Association and the Williamson County Medical Society.

His practice specializes in sports medicine, arthroscopic surgery of the knee and shoulder, as well as knee reconstruction.

Dr. Bruce is married to Jinnie Bruce, M.D., a general surgeon, fellowship trained in bariatrics surgery and currently working with Seton Surgical Group.

In his spare time, Dr. Bruce enjoys hunting, fishing, cooking and woodworking.



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Stem Cell Treatment



A Natural Guide to Healing



**Bone Marrow
Aspiration Concentrate
(BMAC)**



Stem Cell Treatment

The application of stem cell therapy is a continuously evolving approach to treatment of underlying pathologies. Clinical studies are continuing to expand the possible application for musculoskeletal conditions. A good source of stem cells can be found in bone marrow.

Bone marrow is the soft spongy tissue that is found in the center of your bones. This is source of production for many cells in your body; the immature forms of cells are called stem cells. In order to obtain these cells, a small amount of your bone marrow is aspirated then purified and concentrated into bone marrow aspirate concentrate.

Once processed, bone marrow aspirate concentrate (BMAC) is an innovative therapy to potentially accelerate healing. The stems cells collected from the BMAC have the ability to replicate and differentiate into specialized cells that function to maintain and repair the tissue in which they are found.

Collecting the bone marrow is an outpatient procedure done using sterile technique. Your physician will extract a small amount of bone marrow from your iliac crest, tibia or femur. The site will be injected with a local anesthetic to numb the area; during the collection minimal discomfort may be felt. The bone marrow aspirate will be transferred through a filter and into a specialized centrifuge (Arthrex Angel machine) that will separate and select out the stem cells into a purified concentrated BMAC injection. The actual extraction can take up to 10 minutes, and the concentrating process can take up to 20 minutes.



Q&A

Are there any risks?

Bone marrow extractions are safe procedures when conducted by a trained professional. Complications are rare but can include:

- Bleeding, bruising, temporary increase in pain at the harvest or therapy site.
- Infection, rare in patients with weak immune systems.

How long is the recovery time?

After the procedure and treatment, pain at the harvest site may last 3-7 days and increased pain at the therapy site may last 3 days. Results from MSC injections take at least 3 months and may improve out to 1 year.

Is Bone Marrow Aspirate injection covered by insurance?

Though stem cells have been used for decades, their application for treatment in outpatient conditions is relatively new. Because of this, insurance companies do not currently cover the procedure.

What is the post-op protocol for patients?

Please consult your physician to learn the best protocol for your treatment as this may vary with patients.