#### WHAT CAN I EXPECT POST-PROCEDURE?

Stem cell procedures are usually done as an outpatient, meaning there is no need for an overnight hospital stay. Most patients should expect to walk out of the clinic and resume lowimpact activities immediately.

Some patients have reported experiencing mild pain for the first 48-72 hours post-procedure. In most cases, this is due to the absence of their normal anti-inflammatory and pain relief drugs. After this period, most patients experience a gradual decrease in pain, with some experiencing sustained pain relief. Soon afterward, patients may see improved function.



# WHEN CAN I RESUME PHYSICAL ACTIVITY?

The most important part of any stem cell therapy is adhering to your post-procedure restrictions. For the procedure to have the best chance to yield lasting benefits, most physicians strongly recommend:

- No anti-inflammatory medications for two weeks post-procedure.
- Rest as much as possible for the first 24-48 hours.
- Restrict the joint to general use for the first 2 weeks.
- For weeks 3-4, light lifting is allowed.
- After 4 weeks, weightlifting and running are permitted.
- Pay attention to your shoulder as you resume normal activity.



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## **PATIENT EDUCATION:** The use of stem cells In shoulder therapies



### THE HEALTHY SHOULDER

The shoulder is a combination of the glenohumeral and the acromioclavicular joints, both of which rely on surrounding muscles, ligaments, and connective tissues for proper function. Here is a brief overview of the properties of a healthy shoulder.

- The human shoulder is composed of the clavicle (collarbone), the scapula (shoulder blade), and the humerus (upper arm bone).
- These bones are held together by rotator cuff and bicep tendons and ligaments, and separated by a shock-absorbing layer of smooth articular cartilage.
- The cartilage allows the bones to roll over each other with little resistance.



### PROBLEMS OF THE SHOULDER

Some common problems experienced in the shoulder include:

- Osteoarthritis, rheumatoid arthritis, avascular necrosis
- Rotator cuff injury
- Shoulder bursitis
- Swollen or inflamed synovial membrane, the lining of the joint
- Glenoid labrum tear

#### WHAT IS A STEM CELL PROCEDURE?

A stem cell procedure harnesses and amplifies the body's natural mechanism for healing (and anti-inflammation). This mechanism uses adult autologous stem cells derived from your own bone marrow.

In the procedure, the physician will aspirate bone marrow from the iliac crest of your pelvis, concentrate them, then apply the concentrate to the injured site. In all, the process takes less than 45 minutes.

Depending on your condition, your doctor may decide to deliver the stem cells following an arthroscopic procedure to remove damaged cartilage or bone. This will not affect the stem cell procedure; it allows the surgeon to visualize the target site.

Because the therapy will utilize a concentrated preparation of your own cells, the procedure is considered "autologous point-of-care". The procedure is fast, and in most cases can be completed with moderate sedation.



# WHO IS A GOOD CANDIDATE FOR A STEM CELL PROCEDURE?

The ideal candidate for a stem cell procedure is a patient that wants to use their body's own regenerative potential as an option to possibly delay or avoid invasive surgery.



**PREPARING FOR MY PROCEDURE** As with any medical procedure, it is important to consult your physician about preparation.

Because the stem cells communicate with the inflammatory environment around them, non-steroidal anti-inflammatory drugs (NSAIDs) should not be taken for two weeks prior to the procedure.

