



**UNC**  
**ORTHOPAEDICS**

# **Managing Your Arthritis**

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## **Management options for your arthritis:**

Arthritis, also called osteoarthritis, is a breakdown of the cartilage that cushions your joints. When the cartilage wears down, your bones rub against each other. This causes pain and stiffness. Many people have some arthritis as they age. Arthritis most often affects the joints of the spine, hands, hips, knees, or feet but can occur at any joint in the body.

### ***How Can I Help My Joints Stay Healthy?***

- Stay at a healthy weight. Being overweight puts extra strain on your joints.
- Dr. Porras is happy to discuss exercises that will help ease joint pain.
  - Stretch. You may enjoy gentle forms of yoga to help keep your joints and muscles flexible.
  - Walk instead of jog. Other types of exercise that are less stressful on the joints include riding a bicycle, swimming, tai chi, or water exercise.
  - Lift weights. Strong muscles help reduce stress on your joints. Stronger thigh muscles, for example, take some of the stress off of the knees and hips. Learn the right way to lift weights so you do not make joint pain worse.
  - Dr. Porras is happy to provide you with a home exercise plan if interested.
- Depending on the joint, bracing may be helpful. Dr. Porras may discuss this with you.

### ***What Options Do I Have For Managing Pain?***

- Over the counter medicines can work well for pain. It is OK to use anti-inflammatories (ie. Aleve, Motrin, Ibuprofen, Naprosyn) for up to two weeks. If you need pain medicine for a more regular basis, Tylenol Arthritis is a better option.
- Put heat or cold on your sore joints as needed. Use whichever helps you most. You also can take turns with hot and cold packs.
  - Use heat 2 or 3 times a day for 20 to 30 minutes. Use a heating pad, hot shower, or hot pack. These help relieve pain and stiffness.
  - Put ice or a cold pack on your sore joint for 10 to 20 minutes at a time. Put a thin cloth between the ice and your skin.

## Injections:

If you have tried all of the options listed above, injections may be helpful for you. Dr. Porrás specializes in injections (shots) that help treat pain linked with arthritis. Depending on the joint, Dr. Porrás may use an ultrasound machine to do the procedure.

Please look over the following charts to learn more about injection options.

<b>Corticosteroid Injection</b>	
<b>Also Known As:</b> Cortisone injection, steroid shot	
<ul style="list-style-type: none"><li>• Cortisone injections may help the inflammation related to the arthritis in your knee joint, which can reduce pain.</li><li>• Cortisone injections are a combination of two corticosteroid medicines and a local anesthetic medicine.</li></ul>	
<b>Pros</b>	<ul style="list-style-type: none"><li>• The injections may provide a quick benefit due to the local anesthetic (numbing) medication</li><li>• The effect of the corticosteroid medication may take several days before it starts working.</li><li>• On average, the pain relief may last between weeks to months, with the average being 3-4 months.</li></ul>
<b>Cons</b>	<ul style="list-style-type: none"><li>• Due to possible side effects, the injections per joint are typically limited to <b>no more than 3 injections</b> per year.</li><li>• In diabetics, they can raise your blood sugar.</li><li>• For people with high blood pressure, they can raise blood pressure.</li><li>• They can cause difficulty sleeping.</li><li>• They can change the color or the quality of your skin.</li></ul>
<b>Cost</b>	<ul style="list-style-type: none"><li>• These injections are covered by most insurances, Medicare, and Charity Care.</li></ul>

### ***What Should I Expect After the Procedure?***

You can have some numbness and tingling for 24 hours and it can take as long as 7-10 days to kick in. Some people feel worse before they feel better.

<b>Viscosupplementation/Hyaluronic Acid</b>	
<b>Also Known As:</b> "Jelly shots," "Lubricant shots," "Rooster shots"	
<b>Brand Names:</b> Synvisc, Supartz, Orthovisc, Monovisc, Eufflexa, etc.	
<ul style="list-style-type: none"> <li>• Viscosupplementation can be helpful for patients with mild to moderate arthritis.</li> <li>• Hyaluronic acid is a naturally occurring substance found in knee joint fluid. It acts as a lubricant and shock absorber.</li> <li>• People with knee arthritis may have lower levels of hyaluronic acid in their knee joints.</li> <li>• With viscosupplementation, a gel-like substance containing hyaluronic acid is injected into the knee joint.</li> </ul>	
<b>Pros</b>	<ul style="list-style-type: none"> <li>• On average, these injections last 6 months. If effective, viscosupplementation may be repeated after six months.</li> <li>• The most common side effects are mild increase in swelling and pain in the joint.</li> <li>• It does not raise blood sugar or blood pressure like steroid does.</li> </ul>
<b>Cons</b>	<ul style="list-style-type: none"> <li>• The injections are performed weekly for three weeks.</li> <li>• Viscosupplementation does not have an immediate pain-relieving effect, but the benefit can last for several months.</li> </ul>
<b>Cost</b>	<ul style="list-style-type: none"> <li>• Covered by insurance for knees.</li> </ul>

***What Should I Expect After the Viscosupplementation Injection?***

Side effects are rare but most common side effects include increased swelling and pain the first two days after injection. If this occurs, please put ice on your joint. Dr. Porrás needs to be contacted if your joint develops massive swelling, redness, or fevers.

# Orthobiologics:

Using cells to fight inflammation and heal tissue.

<b>Amniotic Membrane</b>	
<b>Also Known As:</b> [colloquial names here]	
<ul style="list-style-type: none"><li>• Human amniotic membrane is derived of the same nutrients and growth factors that facilitate fetal growth.</li><li>• The naturally present cells include cytokines, carbohydrates, lipids, hyaluronic acid, growth factors, and multipotent cells.</li><li>• These tissues provide a non-steroidal mechanism to alleviate pain through reducing inflammation.</li></ul>	
<b>Pros</b>	<ul style="list-style-type: none"><li>• It is one injection that does not require a blood draw.</li></ul>
<b>Cons</b>	<ul style="list-style-type: none"><li>• Usually you can expect 9-12 months of relief.</li></ul>
<b>Cost</b>	<ul style="list-style-type: none"><li>• This treatment is <b>NOT COVERED BY INSURANCE.</b></li><li>• Will cost \$1,600 per treatment for large joints, and \$1,200 for small joints.</li></ul>

### ***How is the amniotic membrane prepared?***

The injection substance is derived from live, willing donors and does not involve any fetal tissue. In addition, the amniotic membrane material is FDA regulated and processed in an ISO certified lab, so all major diseases are ruled out.

### ***What Should I expect after the procedure?***

You can have some increased pain and swelling for 48 hours after procedure.

# Platelet Rich Plasma

**Also Known As:** "PRP," "Blood shots"

- Platelet rich plasma is concentrate from blood that contains approximately three to five times more platelets than the normal concentration of platelets in human blood.
- PRP promotes cell activities, including inflammation, growth and remodeling, all of which are necessary in healing.
- For arthritis, it helps fight the chronic inflammation that causes your pain.

<b>Pros</b>	<ul style="list-style-type: none"><li>• You use your own cells for treatment.</li><li>• Depending on the degree of your arthritis, on average, patients can expect 9 months to 2 years of improvement.</li></ul>
<b>Cons</b>	<ul style="list-style-type: none"><li>• You will require multiple treatments 2-3 weeks apart.</li></ul>
<b>Cost</b>	<ul style="list-style-type: none"><li>• This treatment is <b>NOT COVERED BY INSURANCE.</b></li><li>• Will cost \$500 per treatment.</li></ul>

## ***How is Platelet Rich Plasma Prepared?***

Blood is first drawn from your arm with a syringe. Then, it's centrifuged (spun) and separated out into three layers.

## ***What Should I Expect Before a PRP Treatment?***

Before the procedure, you should not take any anti-inflammatory medications such as Motrin (ibuprofen), or Aleve (naproxen) for at least 5 days prior to the procedure, as these medications could alter the effectiveness of the procedure.

## ***What Should I Expect After the Procedure?***

After the procedure, ice should not be applied to the area. Ice can decrease the success of the PRP. Activity should be limited for the first 1-2 days. Medicines such as Motrin (ibuprofen) and Aleve (naproxen) should not be taken within the first two weeks. They can stop the healing effects of the PRP. Since the PRP promotes inflammation, there will be some discomfort after the treatment. This will subside, however, with time, and acetaminophen (Tylenol) may be used for pain control.

<b>Stem Cells</b>	
	<ul style="list-style-type: none"> <li>• Stem cells can be isolated from several tissues, including the fat pad of the knee, bone marrow and fat (adipose) tissue.</li> <li>• Several studies have shown stem cells have the ability to migrate and attach to multiple musculoskeletal tissues and undergo transformation into the injured tissue.</li> <li>• Given these properties, stem cells have increasingly been used to treat osteoarthritis.</li> </ul>
<b>Pros</b>	<ul style="list-style-type: none"> <li>• You use your own cells for treatment; depending on your degree of arthritis you can expect 18 months to &gt;2 years of improvement on average.</li> </ul>
<b>Cons</b>	<ul style="list-style-type: none"> <li>• Cost (see below)</li> </ul>
<b>Cost</b>	<ul style="list-style-type: none"> <li>• This treatment is <b>NOT COVERED BY INSURANCE.</b></li> <li>• It will cost \$3000 for one treatment or \$4000 for both sides.</li> </ul>

***How are the stem cells prepared?***

Stem cells can be taken from bone marrow with a bone marrow biopsy. In this case, your doctor will draw bone marrow and stem cells from your bone using a needle. In most cases, this is drawn from the hip. The cells can also be taken from fat. In this case, your physician will do a liposuction of adipose (fat) from your abdomen or hip.

***What should I expect before the procedure?***

Before the procedure, you should NOT take any anti-inflammatory medicine such as Motrin (ibuprofen), or Aleve (naproxen) for at least 5 days before the procedure. These medicines could change how effective the procedure is. The area of cell collection will be cleaned and sterilized. The area will be numbed with lidocaine. A small cut will be made, and a needle will remove the cells.

***What Should I expect after the procedure?***

After the procedure, ice should not be applied to the area that was treated. Ice can decrease the effectiveness of the stem cells and PRP. Ice can be applied to the harvest site (hip or abdomen), and activity should be limited for the first few days. Medications such as Motrin (ibuprofen), or Aleve (naproxen) should also not be taken within the first two weeks since it can stop the healing effects of the treatment. Like PRP, stem cells promote inflammation. So there will be moderate discomfort after the treatment. This will subside with time, and acetaminophen (Tylenol) may be used for pain control.

## Recap

Please take a moment to review over the options listed in this handout. Think about the benefits, drawbacks, and costs for each of the options. Use the spaces below to write down important notes about your options.

<b>What “pros” are most important to you?</b>	
<b>What “cons” are most important to you?</b>	
<b>What cost issues are important to you?</b>	
<b>What questions that you have for Dr. Porras?</b>	

If it is helpful for you, bring this note page along to your next appointment.