

PATIENT EDUCATION

REGENERATIVE MEDICINE

- 1 WHAT IS REGENERATIVE MEDICINE?
- 2 ABOUT PRFM AND LIQUID AMNION
- 3 COMMON QUESTIONS ABOUT REGENERATIVE MEDICINE
- 4 WHAT CAN I EXPECT THROUGHOUT THE PROCESS?

1

WHAT IS REGENERATIVE MEDICINE?

Regenerative medicine is a cutting-edge form of treatment that involves biological therapies to assist in your body's natural healing process. Injecting these powerful components has been shown to stimulate healing and speed repair for bone, muscle, joint, soft tissue and nerve injuries through a process called cell signaling (please refer to our website for supportive literature). Our therapies can be used to treat a wide range of acute and chronic injuries and pain. Patients who have a recent injury as well as patients who have failed conservative conventional treatments such as anti-inflammatory medications, injections therapy, physical therapy or chiropractic, surgery, and rest may benefit from treatment.

INNOVATIVE PAIN AND WELLNESS OFFERS TWO REGENERATIVE MEDICINE TREATMENTS: ONE USING THE PATIENT'S OWN CELLS, AND ANOTHER USING DONATED CELLS. WHEN USING THE PATIENT'S OWN CELLS, WE USE YOUR BODY'S PLATELETS AND PLASMA. WHEN USING DONATED CELLS WE USE A LIQUID ALLOGRAFT DERIVED FROM THE AMNIOTIC COMPONENTS OF DONATED PLACENTA, TO ADVANCE SOFT TISSUE REPAIR, REPLACEMENT, AND RECONSTRUCTION.

Ask your Innovative Pain and Wellness provider about a consultation to explore individualized treatment plans for each patient and determine if you are a candidate for regenerative procedures.

2

PLATELET-RICH FIBRIN MATRIX (PRFM)

Using your own cells

Platelet-rich fibrin matrix (PRFM) is a concentrated form of the platelets and plasma in your blood, obtained by processing your blood in a special centrifuge. When an injury occurs, platelets naturally begin the healing process in your body. The platelets release cell signaling proteins that attract your own body's inherent stem cells to the injured area. By injecting concentrated PRFM into an area of concern, your body recognizes this site as a priority, working to heal more quickly and thoroughly. As part of our multi-modal treatment algorithms at Innovative Pain and Wellness, we engage you in a physical therapy regimen to advance the healing process.

LIQUID AMNION

Using donated cells

Liquid amnion is liquid allograft derived from the amniotic components of donated placenta, to advance soft tissue repair, replacement, and reconstruction. The donor of the donated human tissue has been deemed free from risk factors for and clinical evidence of infection due to relevant communicable diseases and other exclusionary disease conditions through the review of the donor's medical records, including medical/behavior risk assessment and a recent physical examination. Similar to PRFM, by injecting liquid amnion into an area of concern, your body recognizes this site as a priority, working to heal more quickly and thoroughly. As part of our multi-modal treatment algorithms at Innovative Pain and Wellness, we engage you in a physical therapy regimen to advance the healing process.

COMMON QUESTIONS ABOUT REGENERATIVE MEDICINE

The first stage involves simply the immediate effects of injury, including bleeding, blood clotting, and cellular breakdown. The inflammatory response is the primary means that the body uses to respond to the injury.

1) WHY DON'T I GET "STEM CELLS"?

Regenerative medicine is an exciting and evolving form of healing. The more research that is done on this therapy, the more scientists push towards using the bodies own, natural healing. The term "stem cells" has become a synonym in society for regenerative medicine when, in fact, very rarely are actual stem cells indicated or used. In fact, the FDA is working towards a ban of the use and marketing the words "stem cells" as it is misleading. PRFM is the front-line treatment of choice for most conditions. It uses the bodies own natural healing properties and the outcomes are proving superior to older products commonly referred to in the public as "stem cells". At Innovative Pain and Wellness, we strive to provide a fully transparent and ethical patient experience. Therefore, we have chosen to follow the current guidelines and not use the words "stem cells".

2) WHAT CONDITIONS CAN BE TREATED?

There are a number of conditions that can be treated with regenerative medicine at Innovative Pain and Wellness including but not limited to:

- ARTHRITIS OF THE JOINTS AND SPINE
- PAIN IN JOINTS AND MUSCLE
- MUSCLE STRAINS
- LIGAMENT TEARS OR SPRAINS
- VARIOUS FORMS OF TENDINITIS OR TENDINOSIS (CHRONIC TENDONITIS) OR TENDON INJURY
- PLANTAR FASCIITIS
- MENISCUS TEARS
- SOFT TISSUE INJURY
- COMPRESSION NERVE INJURIES: CARPAL TUNNEL, ULNAR, RADIAL, AND PERONEAL NEUROPATHY.

3) HOW DO YOU DETERMINE THE PROPER TREATMENT FOR AN INJURY?

The decision, made by your Innovative Pain and Wellness physician, is individualized and based on personal experience as well as the published research of other practitioners who perform similar procedures around the world. Depending on the severity of the injury, and/or disease, some patients require several treatments.

4) HOW IS PRFM DELIVERED TO THE INJURED AREA?

Your own blood will be drawn by a professional about 10 minutes prior to your injection. The blood is then placed in a special centrifuge specifically designed to separate the platelets and plasma for seven minutes. The platelets and plasma are then mixed with a unique fibrin matrix for injection. While the blood is spinning, your Innovative Pain and Wellness physician will accommodate you into the procedure room and prepare you for the simple injection. Once you are ready, the physician will use ultrasound guidance or X-Ray for targeted placement of your body's platelet rich fibrin matrix into the damaged tissue.

5) WILL THE INJECTIONS BE PAINFUL?

A varying degree of discomfort is also associated with the initial injection anesthetic at the injured site. We offer IV sedation for all procedures, and your provider will discuss this with you. With or without sedation, we may use a local anesthetic numbing agent. Usually the anesthetic last for a couple of hours. You may experience slight discomfort for the first 24 to 72 hours during the healing process. Tylenol can also be used if you have no contraindications (please see guidelines below).

6) HOW LONG BEFORE I CAN RESUME ACTIVITY?

This is an outpatient procedure that results in little down time for the patient. Typically, we do suggest you rest the day of the procedure, but you can usually return to normal activities the next day.

7) HOW WILL I KNOW IF I NEED MORE TREATMENTS?

Patients may require one to three treatments and typically experience improvement in pain and mobility within 4-6 weeks with continued improvement over 3 months after procedure. Our goal is to have an 80-90% improvement in pain and function. This can vary depending on the severity of your disease and the intensity of your activity level during the healing process.

8) ARE THERE ANY ADVERSE EFFECTS TO THE TREATMENTS?

The most common side effect is post-traumatic discomfort. For the first 72 hours, some patients may experience low grade fevers, swelling at the site of the injection, mild body aches and fatigue. These symptoms are rare. Specific risks and benefits for each treatment of interest will be discussed at the time of the initial consultation.

9) HOW DO I GET STARTED?

Schedule an initial consultation at Innovative Pain and Wellness and bring all documentation related to your pain including any imaging studies previously obtained. During your consultation we will review your medical history and do an extensive exam, as well as review any films. An Innovative Pain and Wellness physician will then create a multi-modal treatment plan and discuss the plan with you.

10) IS THIS THERAPY EXPENSIVE?

Your initial consultation will typically be covered by your insurance. Your Innovative Pain and Wellness provider will briefly discuss the potential cost based on your insurance situation. The overall cost for the treatment will ultimately depend on the type of treatment recommended and whether one or multiple treatment rounds are necessary. We offer extremely competitive pricing for regenerative therapy, and use insurance benefits anytime possible. In general, the treatment cost is roughly comparable to typical injection co-pays.

It is likely that your insurance benefits will cover the physical therapy after the treatments.

WHAT CAN I EXPECT THROUGHOUT THE PROCESS?

1 THE ACUTE PHASE

· 1ST AND 2ND DAY AFTER TREATMENT

· GOALS:

- Protected rest by using a sling or brace for 2 days, if necessary. Decrease pain by using Tylenol or pain medication prescribed by your physician.
- DO NOT use anti-inflammatory medications (Advil, Aleve, Ibuprofen, etc) - joint inflammation is encouraged as part of the therapy process and repair.
- Try NOT to use ice on the treated area.
- Modify activities to protect the treated joint.

2 THE SUBACUTE PHASE: PHYSICAL THERAPY BEGINS

· TIMELINE: 3RD DAY TO 1ST AND 2ND WEEK

· GOALS:

- Begin Physical Therapy
- Discharge use of sling or brace, except for arthritis (unloader) braces. Continue wearing these 2-3 hours daily during most activity time of day.
- Protect and promote healing on treated joint.
- Gentle and pain free active range of motion on treated joint.
- PT modalities applied on treat joint EXCEPT iontophoresis.
- Gradual return to functional activities at home.
- Ok to ice at day 10 after procedure.
- Ok to resume anti-inflammatory medications, if needed, at 2 weeks post procedure.

3 THE INTERMEDIATE PHASE: PT FULL ROM PHASE

· TIMELINE: 3RD AND 4TH WEEK

· GOALS:

- PRECAUTION: Persistent painful and limited or no improvement of range of motion on the treated joint must be re-evaluated.
- Protect and promote articular tissue healing.
- Restoration of full range of motion on the treated joint.
- Gradually increase functional activities at home.
- At the end of the 4th week, follow up visit with physician.

4 THE STRENGTHENING PHASE: PT STRENGTHENING PHASE

· TIMELINE: 5TH AND 6TH WEEK

· GOALS:

- Re-evaluate for joint range and muscle strength.
- Control compression and shear forces.

THE OUTCOME OF EACH TREATMENT DEPENDS UPON THE SITE AND SEVERITY OF THE INJURY AS WELL AS THE PATIENT'S OWN HEALING POTENTIAL. THE PHYSICIAN WILL DISCUSS THIS WITH YOU AT YOUR INITIAL APPOINTMENT.

ASK YOUR PROVIDER TODAY IF THIS AMAZING THERAPY CAN HELP YOU OR SOMEONE YOU KNOW!