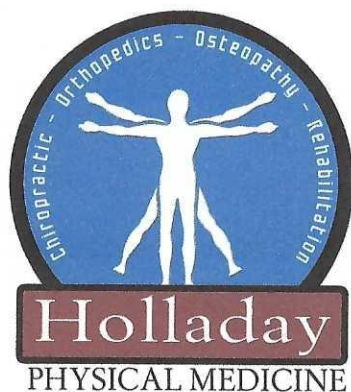


REGENERATIVE MEDICINE

Ozone, PRP and Homeopathic Injections



CONTENTS

What is Regenerative Medicine?	2
Who Qualifies?	3
The Procedure	3
Frequency	4
Indications	4
Contra-Indications	5
Healing	6
Costs	7
Research Results	7
Questions and Answers	9
References	13

What is Regenerative Medicine?

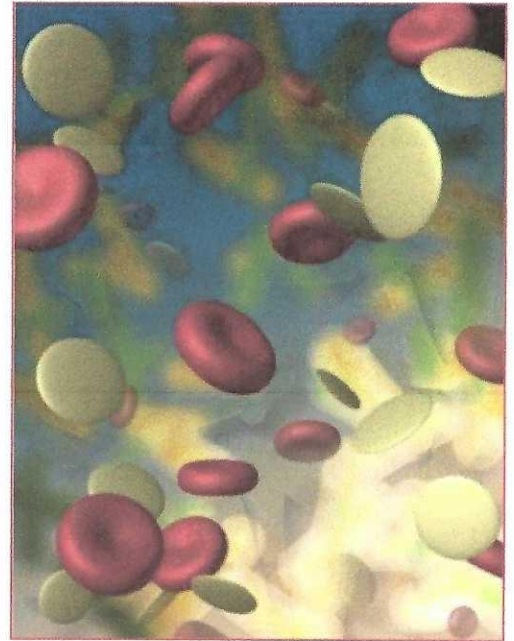
Regenerative Medicine is a branch of neuromusculoskeletal medicine concerned with developing therapies that regenerate or replace injured or defective cells, tissues, or organs to restore or establish function and structure.

Conservative therapy is a vital component to the recovery of soft tissue injury. A variety of neuromusculoskeletal injuries can be treated with regenerative medicine, e.g., PRP, ozone, prolotherapy and stem cell therapy are among these treatments. Appropriate course of rehabilitation can be instrumental in ensuring maximum effectiveness. The chiropractic orthopedist (also known as) a neuromusculoskeletal medicine specialist, has a solid understanding of the healing and the process by which these

various regenerative treatments affect tendon, ligament, muscle, and cartilage injuries/conditions.

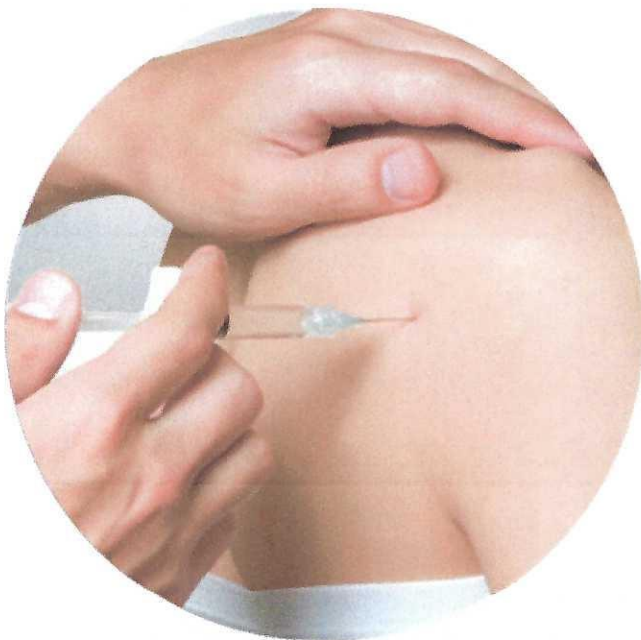
Who Qualifies?

Patients who have musculoskeletal conditions such as strains, sprains, ligaments and muscle injuries as well as cartilage, disc and joint injuries respond well to these regenerative therapies. If these complaints have become chronic, it is wise to consider using one of the modalities of regenerative medicine to find a more permanent level of relief.



THE PROCEDURE

Ozone Injection, Homeopathic Injection, PRP Injection and other procedures are consistent with regenerative medicine. These are delivered by subdermal and intramuscular injections using a small gauge needle.



The doctor will examine the patient and determine the precise site for the injection to do the most healing and pain relief. The patient is usually lying down. The site is marked on the skin. The area is cooled with an ice pack that mildly numbs the site. The site is

then sterilized with alcohol and silver gel prior to injection. The ingredients are delivered into the subdermal or intramuscular layer and the needle is removed.

Following injection, a variety of supportive modalities of physical medicine are considered and delivered. This helps increase rapid absorption of the active ingredients injected, increases blood supply, reduces pain and increases the rate of healing.

FREQUENCY

The frequency of treatment has been set based on the outcome measurements following a study of a variety of protocols. We use the frequency that produces the best long term results and thus the least amount of cost for the patient. When any patient is qualified for the treatment following the intake examination, it means that we expect that patient to respond very favorably by strictly following the protocol completely. Once any patient begins the treatment, we expect complete compliance to the treatment schedule. Partial compliance has shown to produce limited results, extended time in treatment, increased cost of treatment and frustration. It is critical to understand the treatment protocol and frequency in order to commit to it. When followed completely, our results are extremely good.

Treatment Protocol: 1 injection per week per site for up to 4 weeks, then depending on patient response, additional injections may be considered as needed. Patients desiring injections in multiple sites should limit the injections to a total of 3 sites per week. Most patients do not usually need more than 4 injection

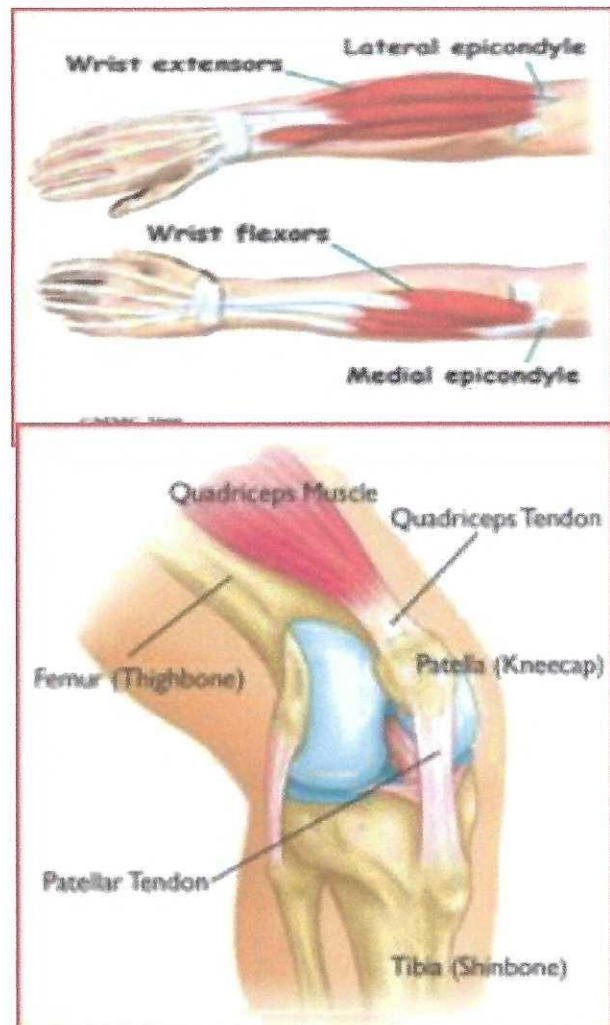
visits per site to resolve the acute pain stage. As ozone is a true healing ingredient, periodic injections help to actually regenerate (heal) the tissue as well as relieve the pain. The benefits of periodic use of ozone has been documented around the world for more than 100 years.

INDICATIONS

Patients who have any of the following symptoms may qualify for the procedure. Specific measurements and findings will be evaluated to see if your condition will respond favorably. Only patients with conditions that are very likely to respond are accepted for treatment.

- Neck Pain
- Arm Pain
- Cervical Disc Disease
- Low Back Pain
- Tendinitis
- Sciatica
- Leg Pain and Numbness
- Lumbar Disc Disease

- Pre-Surgical Patients
- Post-Surgical Patients with Failed Back Syndrome
- Rotator Cuff Tear
- Frozen Shoulder Syndrome
- Hip Pain
- Knee Pain
- Ankle Pain
- Achilles Tendon Pain
- Elbow Pain



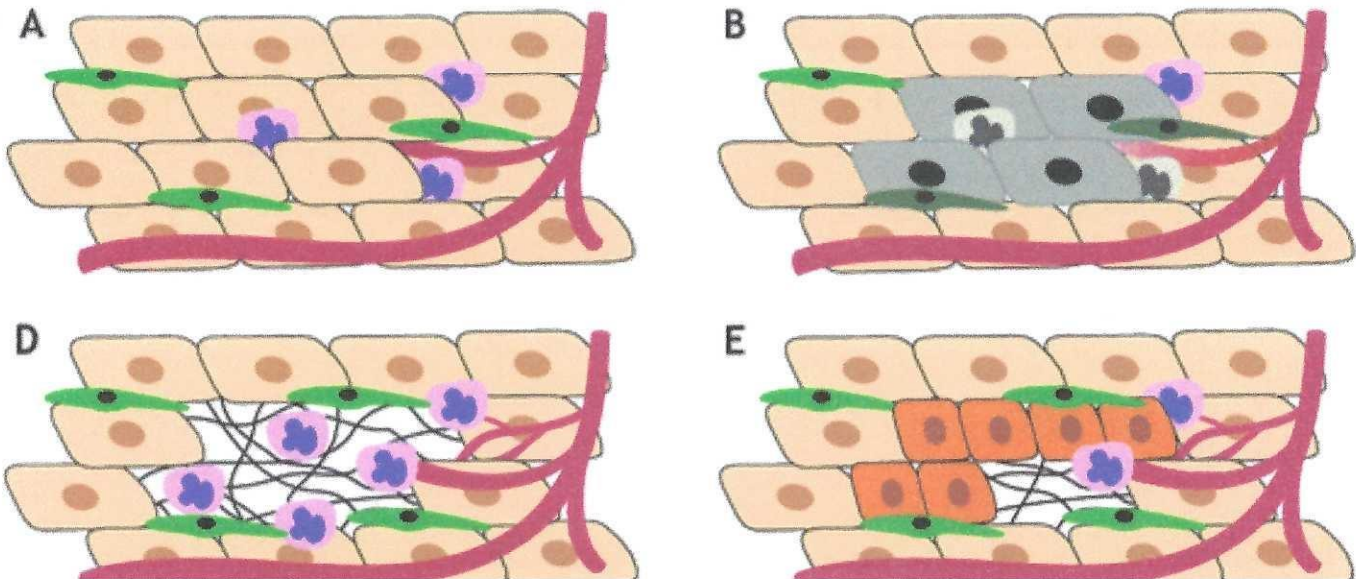
CONTRAINDICATIONS

Some conditions do not respond to the process. These conditions are offered other avenues of care. If you have any of these, please discuss it with the doctor prior to considering an injection.

- Spinal Tumors
- Spinal Infections
- Vertebral Fractures
- Pregnancy (for lower back)
- Cauda Equina Syndrome
- Loss of Bowel or Bladder Function

HEALING

As you will see in the graphic to follow, healthy tissue is relatively symmetrical. Once injury or disease occurs, cells in the tissue become damaged, diseased or destroyed. Oxidation occurs as



healing begins. The presence of O₂ (Oxygen) increases the rate at which this occurs. This is why blood flows more to injured or

diseased tissue at first. As time goes on, the oxygen content of injured tissue diminishes. The injection of Ozone increases the local oxygen content in the tissue and thus rapidly heals the tissue. Several factors other than just the increase in oxygen have been shown to be critical in the healing of these conditions. Each is important to achieve actual healing and not just the reduction of pain.

ITEMS FOR HEALING

1. Injection
2. Control of the Inflammatory process
3. Restoration of function
4. Removal of aggravation
5. Nutritional Support

Complete compliance to each of the five items above can create an environment for best results. The first three items require professional management and the next two require commitment by the patient. Lifestyle changes must occur to prevent the condition from becoming inflamed again. Adherence to the entire nutritional protocol is necessary to make this a reality. There are three basic steps in the nutritional protocol: First, elimination of toxicity; Second, proper consumption of whole foods and supplements as needed and Third, correction of the auto-immune response reaction. The nutritional recommendations are a critical element to completing the reversal of the condition, healing and preventing a chronic problem. As this is a process involving many lifestyle changes, you will need to commit time each day to study this concept.

First, go to our web site: www.holladayphysicalmedicine.com and select “Absolute Health Clinic” to find advice on health. Browse the site for areas of interest.

COSTS

Costs for ozone and homeopathic injection are not covered by insurance plans. Ozone and homeopathic cocktails may be injected in the same injection site as part of the same visit but are separate procedures. The cost for one of these injection visits is \$150.00 and includes up to two injection sites as well as all cocktail ingredients that may be used in conjunction with the ozone. Injection must be paid for at the time of service.

The injection protocol for ozone and homeopathy includes post injection physical medicine procedures such as any combination of electrical stimulation, vibratory massage and manipulation, Rumblex and/or Chi. These will be determined by the doctor following the injection procedure. If your insurance pays for any of these supportive procedures we will send in claims for that if you choose.

RESEARCH

A BRIEF SYNOPSIS OF RESEARCH ON REGENERATIVE MEDICINE

- 1. Intraforaminal O2-O3 versus Periradicular Sterooidal Infiltrations in Lower Back Pain: Randomized Controlled Study: Matteo Bonetti--- CONCLUSION: Oxygen-ozone**

treatment was highly effective in relieving acute and chronic lower back pain and sciatica. The gas mixture can be administered as a first treatment to replace epidural steroids.

2. Ozone therapy: an overview of pharmacodynamics, current research, and clinical utility: Noel L. Smith---

Conclusions: O₃ therapy can alter the natural history of several diseases and disorders potential many more yet untested. A plethora of laboratory studies have provided evidence of O₃'s antioxidant capabilities, as well as vascular, hematological and immune system modulations.

3. Ozone therapy: A clinical review: A. M. Elvis-- Medical O₃ is used to disinfect and treat disease. Mechanism of actions is by inactivation of bacteria, viruses, fungi, yeast and protozoa, stimulation of oxygen metabolism, activation of the immune system.

4. Ozone Injections Promising in Knee Osteoarthritis: Laird Harrison-- — An ozone injection into the knee can soothe pain and improve quality of life for people with knee osteoarthritis, a randomized controlled trial suggests. "When I saw the results I was very surprised," said Virginia Fernandes Moça Trevisani, PhD, from the Federal University of Sao Paulo, who presented the finding here at the American College of Rheumatology (ACR) 2015 Annual Meeting. Ozone appears to inhibit prostaglandins and cytokines and reduce oxidative stress.

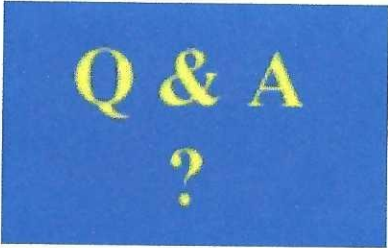
5. Prolozone™ – Regenerating Joints and Eliminating Pain
By Frank Shallenberger, MD, HMD, ABAAM-- I have seen many cases just like Joe's. About 85% of the time they have the same kind of result. I have never had a patient go to knee surgery in fifteen years of using Prolozone. Figure 1 is an x-ray of another patient (not Joe) taken in August. Figure 2 was taken the following February after eight Prolozone treatments. I wish I had more x-rays like this, but I don't routinely take post therapy x-rays. These were done by a colleague trained in the Prolozone technique.



Figure 1. Knee X-ray before Prolozone™ showing severe medial joint space narrowing.



Figure 2. Knee X-ray after Prolozone™ showing increased joint space.

A blue rectangular box containing the text "Q & A" in a yellow serif font, with a yellow question mark centered below it.

Questions and Answers

Most people have many questions about regenerative medicine and the modalities we use to heal the body. We recommend that if you are interested in this process, investigate all the options when it comes to the health of you and your family. Here are some of the common questions that we hear from our patients.

What is a board certified chiropractic orthopedist and why should I go to one?

The chiropractic orthopedist is a chiropractic physician holding a license by the state to practice chiropractic medicine. He has extensive, specialized training in physical examination and treatment procedures emphasizing primarily the neuromusculoskeletal structures of the body including the spine and the extremity joints. This involves conditions affecting bones, joints, muscles, tendons, ligaments, cartilage and related nerve structures.

The chiropractic orthopedist handles both acute health problems such as automobile accidents and sports injuries as well as more chronic conditions including arthritis, scoliosis, and fibromyalgia. We use advanced procedures of x-ray, magnetic resonance imaging (MRI) and computed tomography imaging (CT), electro

diagnostic studies, diagnostic ultrasound, nerve conduction studies (EMG) and clinical laboratory procedures to assist in the diagnostic process whenever they are necessary.

In the course of treatment, the chiropractic orthopedist applies manipulative/adjustive procedures along with other treatment options such as physiologic therapeutics, nutritional counseling, structural supports, corrective devices, exercise and rehabilitation regimens, preventive care advice and home therapy programs for patient health.

What is Regenerative Medicine and how does it work?

Used intradiscally or intramuscularly, regenerative medicine stimulates an acute but tolerable oxidative stress giving a hormetic-type response to regenerating the joint or tissue involved.

Regenerative Medicine can surprisingly display a number of beneficial effects, ranging from the inhibition of inflammation, correction of ischemia and venous stasis to finally inducing a reflex therapy effect by stimulating anti-nociceptor analgesic mechanisms. Its ability to reactivate the innate antioxidant system is the key to correcting the oxidative stress from inflammatory diseases and injuries. It works with the pain pathways and control systems of analgesic signals.

- Analgesic/quenches pain
- Stimulates anti-inflammatory response
- Improves microcirculation
- Stimulates the natural healing processes

Is Regenerative Medicine better than surgery?

In most cases, Regenerative Medicine is better than surgery. This is due to the fact that surgery has inherent risks and physically alters the spine by removing all or part of the disc when sometimes, the disc is not the only part of the spine causing the problem. Although this can reduce the pressure on the nerve and relieve the pain, the surgery tends to place more stress on the healthy adjacent areas above and below. Complications from surgery can be severe and may result in debilitating conditions. Clinical studies show that Regenerative Medicine is successful in about 9 out of 10 cases.

If I've already had back surgery, can I still have Regenerative Medicine?

Having back surgery does not prevent you from having regenerative medicine. In fact, clinical studies show that regenerative medicine provides relief for patients who have had one or more back surgeries.

If Regenerative Medicine works so well, how come I haven't heard more about it?

Regenerative Medicine is a relatively new medical procedure in the United States. It has been used very successfully around the world for over 100 years. The therapy has worked for thousands of patients worldwide. There are about 300 doctors in the US who use Regenerative Medicine and over 30,000 worldwide.

Why should I consider Regenerative Medicine Therapy?

Regenerative Medicine is a Non-Surgical treatment for neuromusculoskeletal pain and dysfunction. It has been proven safe and effective in numerous clinical studies. Many patients are being treated with it every day. Regenerative Medicine is minimally invasive and doesn't have the risks and complications associated with surgery, and anesthesia. It is relatively painless and patients can remain at light duty work while taking treatment. Regenerative Medicine is also easy and convenient. Sessions last about 45 minutes. Most patients with simple cases require less than 4 treatments for relief of symptoms.

Why should I consider seeing the chiropractic orthopedist?

The chiropractic orthopedist focuses practice primarily on neuromusculoskeletal structures and remains informed of the latest research and developments through continuing education and recertification by attendance at chiropractic orthopedic conventions and seminars.

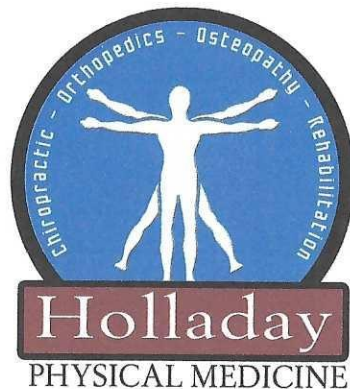
The chiropractic orthopedist is often used by medical practitioners for consultation, by the legal profession and the insurance industry for evaluation and treatment of patients, and the courts for the giving of expert testimony.

Patients who have suffered from conditions that have not responded favorably to previous treatment may seek a doctor with specialized training in advanced non-surgical orthopedic procedures and diagnostic methods.....**That doctor is the Chiropractic Orthopedist.**

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