Pre-Procedural Instructions

It is very important that you drink plenty of fluids and are well hydrated beginning 48 hours prior to your procedure. If you come from a lower altitude, it is especially important to drink plenty of fluids (approximately 64 ounces a day).

Please refrain from taking any anti-inflammatories beginning three weeks prior to procedure and 6-8 weeks post procedure, as they will block the body’s natural ability to heal. A list of anti-inflammatory alternatives can be found below.

Please review information on improving the quality of your stem cells? See: http://www.regenexx.com/2012/05/how-can-i-grow-more-stem-cells-top-10-list-of-things-to-do/

Pre-Procedural Recommendations to Optimize Results

Nutrition
Eat low glycemic index foods, close to a Paleo diet. The mainstay of the diet should be plenty of vegetables and fruits. Moderate amounts of nuts, legumes, whole grains, organic grass-fed meats if not vegetarian. Decrease sweets, conventional meat, wheat, processed foods, fried foods, dairy. No artificial sweeteners. Drink mostly water and teas, decrease sugary beverages. Cut down on alcohol. No more than 1 glass of red wine/day if you drink. No more than two 8 oz. cups of coffee/day.
Read **Nutrition 2.0**: Nutrition 2.0 is a concise guide to eating and living healthy, written by Regenexx™ regenerative medicine doctor, John Pitts. The book gives a basic foundation of information on mostly diet, but also supplements, physical activity, and stress-relief to improve your life. Link: [http://www.regenexx.com/nutrition-2-0-guide-eating-living-achieve-higher-quality-life-now-golden-years/](http://www.regenexx.com/nutrition-2-0-guide-eating-living-achieve-higher-quality-life-now-golden-years/)

**Alcohol and Marijuana**
Alcohol can have profound negative impacts on stem cell function, so this should be avoided for the 6 weeks before and after your procedure. A glass of red wine or white wine with dinner is not a problem, but more than that could pose a risk to the cells. Cannaboids such as marijuana can also promote bone formation over cartilage (not what we want in this case), so should be avoided.

**Supplements**
Regenexx™ supplements are available at our clinic or can be ordered by going to this link: [http://www.regenexx.com/regenexx-advanced-stem-cell-support-formula/](http://www.regenexx.com/regenexx-advanced-stem-cell-support-formula/) you may use promo code: VSSHIP for discounted/free shipping offers.

**Regenexx Stem Cell Support Formula**: We suggest that you take the Regenexx™ Advanced Stem Cell Support Formula supplement during the course of your treatment (approximately 4 weeks or more before your bone marrow draw and at least 4-6 months post-procedure). There is certainly no harm in taking this supplement for a longer period of time. This is a proprietary blend of vitamins, herbs and supplements developed by the Regenexx™ research team that helps support healthy stem cell function and cartilage production.

**Regenexx Turmeric Curcumin Complex**: Physicians also recommend Regenexx Curcumin in addition to the Advanced Stem Cell Support Formula to control inflammation while undergoing the procedure as it has been found to be as effective as over the counter NSAIDS for relief of osteoarthritis pain. Patients can take 750-1500 mg or 1-2 capsules 2-3 times per day in conjunction with the Advanced Stem Cell Support Formula.

**Regenexx Fish Oil**: Two capsules provide 1000 mg of EPA and 500 mg of DHA and includes lipase, a fat digestive aid to ensure maximum absorption. Regenexx fish oil products are provided in the triglyceride form (TG) and carry the TruTG seal. Take two capsules 2-3 times daily.
**Medication Restriction List for Regenexx™ SCP and PL Procedures**

As you may know, we are always concerned with trying to maximize your outcome from your Regenexx SCP™ and Platelet Lysate procedures. Because these procedures involve the ability of your cells to repair tissue and the decade long Regenexx experience has seen that certain medications may interfere with your procedure, we have the following recommendations:

1. **Stop all prescription medications and supplements that can be stopped.** We recognize that some medications may not be safe to abruptly discontinue, so you need to check with your Regenexx™ provider and your prescribing physician. For the medications listed below we recommend stopping for at least 2-4 weeks before and 4-6 weeks after your procedure. For all other medications, stop if able, 1-2 weeks before and 1-2 weeks after your procedure.
   - **Exceptions for supplements (i.e. you can stay on these)** include Glucosamine, Chondroitin, Collagen 2, Hyaluronic Acid, Fish Oil (omega 3s, EPA, DHA), DHEA, Curcumin, Quercitin, Bitter Melon, L-Carnosine, Vitamin C, Vitamin D, and Resveratrol.
   - **Exceptions for prescription medications** include thyroid medication and hormone therapy.

2. **These medications have been shown to be particular problems** in our clinical experience or are suspected to be issues based on what is published in the medical research about their impacts on cells or stem cells. **DO NOT STOP ANY PRESCRIBED MEDICATIONS WITHOUT SPEAKING WITH A PHYSICIAN.**

   **Steroid Drugs** like prednisone, cortisone, inhaled steroids taken for asthma, nasal steroids, or steroid injections like those given for knee or joint arthritis or sciatica. You should be off of these drugs for at least 6 weeks prior to your procedure. **Note that this is more than the two weeks noted above for prescription medications.**

   **NSAID Drugs** like Motrin, Ibuprofen, Aleve, Naprosyn, Celebrex, Voltaren, Cataflam, and other anti-inflammatory medications should be stopped three weeks prior to procedure and six to eight weeks post procedure. If you think you will have intolerable pain with stopping these drugs, then please let us know. We can often substitute high dose fish oils or the Regenexx Advanced Stem Cell Support Formula Supplement for these drugs. In fact, one of the ingredients in the Regenexx™ supplement (Curcumin) was recently shown to be as effective as Ibuprofen for reducing pain and stiffness.
**Statin Cholesterol Lowering Drugs** like Crestor, Lipitor, Mevacor, Pravachol, Vytorin, Zocor and others. If you have a history of heart disease, you must discuss stopping these drugs temporarily with your prescribing cardiologist or internist. If you have no history of heart disease, then while you still may want to consult with your prescribing doctor, you should ask your Regenexx doctor about discontinuing these medications.

**ACE Inhibitor Blood Pressure Drugs** like Lisinopril, Enalapril, Altace, Accupril, Prinivil, etc. If you’re on these drugs, consult with your Regenexx doctor and/or prescribing doctor about switching to a different blood pressure drug.

**Testosterone Inhibitors** like Proscar or Propecia. If you’re on these drugs, consult with your Regenexx doctor and/or prescribing doctor about stopping for a while.

**Quinolone Antibiotics** like Floxin, Noroxin, Cipro, Levaquin, etc. These have been associated with tendon ruptures, so consider speaking with your doctor about alternative antibiotics.

3. **Male or Female Hormone replacement** including thyroid hormones, estrogen, progesterone, testosterone, and growth hormone like Norditropin. You should stay on your hormone therapy and just avoid abrupt changes within 1-2 weeks before or after the procedure.

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**Anti-inflammatory Medication Alternatives**

We do not recommend taking anti-inflammatory drugs (NSAIDs) i.e.: Motrin, Ibuprofen, Aleve, Naproxen, Celebrex, Indocin, Indomethacin, and Aspirins, etc...for three weeks prior to procedure and six to eight weeks after; also, no steroids or cortisone as addressed above. All of these drugs have many side effects with long term use including GI upset, kidney problems, increased cardiac risks and they block the body’s natural ability to heal. Steroids have an even longer list of potential complications. If you are undergoing a Regenexx™ procedure with then you should stop any NSAIDs or steroid treatments that you are on. Below are some alternatives that do not impair you healing mechanisms.

**Acetaminophen (Tylenol)** Take 500mg (1-2 tabs) every 6 hours as needed for pain. No more than 6 tabs or 3000mg in a day. If you have a prescription for Tramadol take an extra strength Tylenol at the same time to potentiate the effects of either drug alone.

**Curcumin/Turmeric:** See Pre-Procedure Recommendations “Supplements”
**Omega 3s:** See Pre-Procedure Recommendations “Supplements.” Omega 3s have anti-inflammatory properties and can help with arthritis pain at high doses. Take 3-4 grams of a mix of EPA and DHA per day divided 2-3 times per day. Don’t take if it has a rancid odor. Best if take with mixed isomers of vitamin E or a mixed antioxidant supplement to decrease the risk of oxidation.

Best brands are:
- Regenexx: Super Concentrated Omega 3 Fish Oil
- Nature’s Bounty: Triple Strength Red Krill Oil or Dual Spectrum Omega 3s
- Meijer Naturals: Omega 3 high EPA fish oil
- Nature Made: Ultra Omega 3 Fish Oil or Burpless Fish Oil
- Finest Nutrition: Cod Liver Oil or Double Strength Fish Oil
- Simply Right: Fish Oil, Vlt D-3 or Wild Alaskan Salmon Oil
- Sundown Naturals; Plant Based Omega 3
- Pure Alaska Omega 3: 100% Natural Omega Natural Omega-sWild Alaskan Salmon Oil; and Purelife Naturals


**Glucosamine:** Building block for cartilage. Helps with mild to moderate arthritis. Take combined with chondroitin +/− MSM. Take 1500mg daily divided in 2-3 doses in a day as it may cause stomach upset if taken all at once. This is in the Regenexx™ Stem Cell Support supplement as well.

**Arnica:** This homeopathic medication can be taken orally or topically. It helps with acute traumas, bruises, soreness, and arthritis. Take 2x daily for 1 week. If no improvement after 1 week, then stop.

**Bromelain:** A pineapple extract and a natural anti-inflammatory. As a tablet take 500mg 2-3 times daily. In capsule formulations: 2,000MCU per 1000mg or 1,200 GDU per 1000mg.

**Capsaicin Cream:** Made from hot peppers and decreases substance P which leads to decreased pain. Helps with pain in superficial joints and muscles. Apply a moderate amount of 0.025% or 0.075% cream up to 3 times daily. I recommend using gloves or washing hands very thoroughly after use because the cream can burn. Do not touch eyes, nose, mouth, or genitals after use as it can cause irritation and burning.

**Vitamin D:** hormone made from exposing your skin to sunlight. Most People are chronically deficient which can contribute to chronic pain. I recommend 2-5,000 IU daily. This is in our Regenexx Stem Cell Support Formula as well.
**Ginger:** Has been shown to help treat migraines, and menstrual cramps. Take ¼ teaspoon of ground ginger 3x daily at the onset of migraine or cramps.

**Cherries:** Can reduce incidence of gout flares. Eat ½ cup of fresh or frozen cherries daily or tablespoon of cherry juice concentrate 2x daily.

Allow 1-4 weeks to notice a difference in pain for Bromelain, fish oil, glucosamine and turmeric. If you take any prescription medications or have any medical conditions discuss with your physician before taking any of the above products. For turmeric and fish oil, discuss with your doctor if you take any blood thinners such as Plavix or Coumadin because it may increase the risk of bleeding. **Stop fish oil at least 2 weeks before any surgeries and at least 3 days before any other procedures/injections, but can restart immediately after a Regenexx™ procedure.**
**Post-Procedure Information and Instructions**

**General Instructions for All of Our Procedures:**

- Our procedures are activity as tolerated unless otherwise specified by your doctor. This means that you should be as active as you feel able. For example, if you’re in a lot of pain, then take it easy and stay off the area or avoid activities that would aggravate the area. If you feel good, without pain or symptoms, then slowly test the area with activity. If you still feel good, then you can try more activity. If you have been placed on crutches, in a brace that locks the joint—this may not apply to you. In these rare instances, please ask the staff.

- We generally don’t want to suppress inflammation, so stay off of anti-inflammatory drugs (Motrin, Ibuprofen, Aleve, Naprosyn, Celebrex, etc…) and don’t use ice. If you want, heat is fine.

- With any injection, always be on the lookout for signs and symptoms of infection. This would include: fevers, chills, sweats, hardness and/or redness in the area injected, pus, or continued pain beyond what would normally be expected from an injection.

**Epidurals and Spine Injections**

If you had an injection in your back, your legs may be numb or weak for several hours and your bladder may be numbed (i.e. avoid drinking excessive fluids). If you had a neck injection, your arms may be numb or weak for several hours. While longer periods of numbness can occur, they are more are. You should call your doctor if you have numbness, weakness, or nerve symptoms caused by the shot that lasts more than 24 hours. Please be careful walking, driving, operating machinery, or with other activities that involve the numb areas. **Until these areas are no longer numb, you are at higher risk of falling or injury.**

**Prolotherapy and Platelet Injections into Joints and/or Ligaments and/or Tendons and/or Muscles**

These injections are supposed to cause an inflammatory reaction before you begin to feel better. You must expect that the area will be from mildly sore to very sore for as little as a few days to as many as a few weeks. If significant soreness lasts longer, please call your doctor.
**Nerve Injection (Hydro-dissection)**

These injections can cause a temporary increase in nerve type symptoms including numbness, burning, tingling, or weakness. You should contact your doctor if these symptoms persist for more than a few weeks.

**Top 5 Things You Should Call Your Doctor About:**

1. Fever, chills, sweats, hardness or redness at the injection site.
2. Heart palpitations, sweating, increased heart rate related to the procedure.
3. A marked increase in pain after the procedure than lasts more than a few weeks.
4. Fluid retention, swelling in the face, or severe insomnia due to the injection. If you are diabetic, if steroids were used, you may have to much more closely monitor your blood sugars.
5. Severe headache after an epidural injection. This could indicate a “dural leak” and is usually easily remedied with an injection of your own blood into the area to parch the leak (blood patch).

**Complications/Physician Contact**

If you have an emergency, your first call should always be to 911. If you have another issue that can’t wait until normal business hours (excessive swelling, fevers, chills, sweats, local hardness, redness, or pus at the injection site), please contact Dr. Richnak as follows:

jrichnak@mtnviewrehab.com
cell: 530-513-0025

**Thank you for trusting us with your care!**