

### Post-Injection Information & Instructions

1. Soreness, a bruised feeling, increased pain, local numbness at the injection sites, swelling (sometimes a lot) are typical post injection. The worst of it is usually over in 24 hours, but it can last 4-7 days. Pain medicines such as Tylenol (acetaminophen), Ultracet, Vicodin/Lortabs (hydrocodone), or Percocet (oxycodone) can be used for post injection pain, but use for as short a period as possible. Try to use ice very sparingly, if at all. Avoid heat for the first 24-48 hours.
2. NO anti-inflammatory medicines before or after injections (minimum of 3-5 days prior). This includes Advil (ibuprofen), Aleve (naproxen), Orudis (ketoprofen), aspirin (if on mini-dose for your heart stop it for 3 days prior and 3 days after injection), even Arnica cream! Also no prescription anti-inflammatories, such as, Celebrex, diclofenac, Relafen, etc.
3. Be as active as you can once the anesthetic agent wears off. MOVE IT!
4. Breathe! Take time every few hours (at least!) to do some diaphragm breathing. It improves fluid flow to and from all the tissues, not to mention oxygen, and helps relax muscles.
5. If injections were to the spine or lower extremity, avoid prolonged sitting, walk soon after the procedure, avoid twisting, heavy lifting, pushing/pulling, and don't "push it" for at least 4 days post injection. For neck and upper extremities go through easy range of motion and gentle stretching often in the 4 days post injection, and avoid any vigorous activities with the arms (again, don't "push it!"), preferably for 3 weeks.
6. Typically, results start to really happen by the fourth set of injections (4 to 8 weeks) for the spine and lower extremities, and sooner for the neck and upper extremities. It is a process, and your body has to generate a healing response. It is not an instant fix; it takes time. Typically 4-8 sessions are necessary for the back, less for the neck and extremities. Even for those who feel early/rapid improvement, don't fool yourself into thinking you're all better and overdo.

### Diet Recommendations

7. Eat a high protein diet, preferably 5 times a day. Beef/beefalo, bison, turkey, eggs, chicken, or fish. Dairy and soy are OK. Vegetarians must make a special effort, and several types of protein powders are available. There are egg, whey, rice, hemp, and soy protein powders. For vegetarians, those with poor eating habits, or those who can't manage to eat protein frequently (or enough), use Proline, Lysine, and Carnitine amino acids 500mg capsules, 2 capsules of each 2-3 times/ day. Consider eating high protein bars as snacks.
8. Avoid all trans fats!! These are toxic/poisonous to the cells of your body, and impede healing. They are in virtually all commercial baked goods, even those from local supermarkets.
9. For patients with osteoarthritis, Identifying and eliminating/desensitizing food allergies may be helpful. A 4-to 6-month trial of avoiding "Nightshades" (white potato, tomato, bell pepper, eggplant, tobacco) may be helpful.

## Supplement Recommendations

10. Take a high potency multi vitamin. It is important to get adequate amounts of B vitamins, C, E, calcium, magnesium, zinc, chromium, selenium, and manganese. Best to take them with each meal (or at least with 2 meals/day), so a multi that requires 2-6 capsules per day makes that easier (eg. Basic Nutrients, Nutrient 950, Women's Symmetry).
11. Omega - 3 oils have been shown to increase collagen production in injured ligaments. We recommend 2000 mg 2x per day of a high quality fish oil such as Ohana, or Nordic Naturals
12. Niacinamide, 500 mg, 4-6 times a day, or 1,000 mg, 3 times a day, or 1,000-1,500 mg time-release niacinamide, 2 times a day. Niacinamide does not work as well with less-frequent administration of larger doses. If nausea or queasiness occurs, stop and resume at a lower dose. Liver enzymes need to be monitored after 3 months and periodically thereafter.
13. To help the process, using MSM (Methyl Sulfonyl Methane) in doses of at least 1500mg/day, is highly recommended.
14. Consider taking OPC's (red wine grape seed extract) beginning on the 5th day post injection, but stopping 3 days prior to the next injection. After the last injection, use it for 6 months. The dose is 50-200mg twice a day of a standardized potency.
15. If I suspect hormonal or vitamin deficiency, initial blood testing may be done before any injections, and any optimization of hormonal/vitamin levels to maximize healing potential will then be based on laboratory data.
16. For those on cholesterol lowering drugs (statins), it is essential to take CoEnzyme Q10 60-100mg/day. Statins deplete this naturally occurring substance, which results in depleted cellular energy. Healing is often quite difficult without CoQ10. Even for those not on Statins, CoQ10 can aid healing.

### **Patients with osteoarthritis receiving intra-articular injections should consider the following:**

17. Glucosamine Sulfate (without chondroitin) daily. The dose is 1500mg/day if your weight is under 150 lbs, and 2000mg/day if over 150 lbs. It can be taken as once or twice a day dosing, with or without food. We recommend AR Encap which is a combination formula of Glucosamine, MSM and joint supportive nutrients and plant based medicines
18. S-Adenosylmethionine. SAME is a dietary supplement used in the management of osteoarthritis (OA) symptoms. SAME has a slower onset of action but is as effective as the prescription medication, Celecoxib (Celebrex) in the management of symptoms of knee osteoarthritis. 800 -1200 mg per day on an empty stomach

Most of the supplements listed above are available at this office.

You can go to [www.aaomed.org](http://www.aaomed.org) or my web site for more information.