

Sean Mulvaney, M.D.

About Prolotherapy

Prolotherapy, which stands for proliferative therapy, has been used as a treatment modality since the 1950's. Prolotherapy targets chronic ligamentous laxity as the cause of many cases of joint and spine pain. The theory behind prolotherapy states that with time and small traumas, the ligaments holding a joint together gradually loosen and allows the joints or spine to move beyond their intended parameters, resulting in pain and degraded joints. Prolotherapy can induce a productive healing response from the body's own repair mechanisms. When injected into or near a ligament or tendon, the hyperosmolar dextrose induces a mild cellular fluid shift, which in turn initiates an inflammatory response. We use 15% - 20% dextrose for our prolotherapy solution because it is safe and effective. This is an inflammatory process and inflammation is the vital first phase of healing.

What to expect and how to prepare for Prolotherapy

- **5 days prior to the procedure:** Stop taking anti-inflammatory drugs like ibuprofen, Naprosyn, Celebrex. Let your doctor know if you have been taking prednisone or other corticosteroids in the last month.
- **The day of the procedure:** If you are having an upper body procedure wear a top that can button or zip up.

Prolotherapy will initiate a productive inflammation and may cause the body part treated to be sore for up to a week. Anti-inflammatory drugs (i.e. ibuprofen, Naprosyn, Celebrex) and corticosteroids such as prednisone can blunt or stop this process, so it is important to not take any anti-inflammatory drugs for 5 days prior to treatment and for at least three weeks after prolotherapy. You may need a driver to bring you home, but most people feel well enough to safely drive. Tobacco is a potent toxin and its use constricts small blood vessels which are needed for tissue repair. Tobacco use will limit the effectiveness of any treatment and stopping tobacco use is one of the single greatest actions you can take to improve your health. Avoid toxins like alcohol for 5 days after treatment, which inhibits and depresses the cells needed for tissue repair.

What happens during the prolotherapy procedure?

The prolotherapy used is a solution of 15% dextrose and is mixed in either IV fluid or 1% lidocaine (a "numbing" medication) to make the correct concentration. The skin at the injection site is numbed using a small needle and local anesthetic (buffered lidocaine). Dr. Mulvaney will then precisely inject the prolotherapy into the specific anatomic locations using ultrasound guidance.

What to do after your procedure

- Usually little or no medication is needed to control post-procedure discomfort by most patients. Avoid NSAIDs like ibuprofen. Acetaminophen can be used for mild pain.
- After 2 days, unless otherwise instructed, the treated body part should be used and slowly moved through its full range of motion. It will be sore, but you will not be doing damage by moving it, in fact it needs to move to heal.
- For the next month avoid activities that specifically hurt you before being treated. Follow the rehabilitation instructions (which can be found at drseanmulvaney.com) for your treated body part. Exercise is vital to good health and finding a way to cross train around your injury is important not only for your physical health, but for your mental health as well. Ask about cross training options for your injury.
- Some brief (10 minutes or less) period of heat or ice therapy will not hurt the therapy, but it is not required.
- Depending on the injury, physical therapy may be started from two weeks to four weeks after injection. Improvements in pain and function should be expected from 8 weeks to 12 weeks after injection. Prolotherapy is most commonly done as a series of three treatments, each about one month apart.