

Pre-Procedure of Prolotherapy

- The doctor will firstly evaluate the physical condition of patients with joint pain / back pain.
- The doctor will evaluate using appropriate imaging, such as an X-ray / CT scan to assess its condition, location, and severity.
- The doctor will determine if the patient needs prolotherapy or other therapy.
- If prolotherapy is recommended, the patient should stop taking anti-inflammatory drugs, both steroids (eg prednisone, methylprednisolone) and non-steroids (eg aspirin, ibuprofen, diclofenac, celecoxib) for 2-3 days before the procedure. This is because these anti-inflammatory drugs can inhibit the effectiveness of prolotherapy.



The Procedure of Prolotherapy

- Doctor will sterilize of the injection site with an alcohol swab or other sterile cleaning fluid.
- Hypertonic dextrose solution is injected into several points targeting the joint gaps, tendons, and ligaments that are affected.
- This procedure can also be performed with ultrasound guidance so that the injection site is more precise.

Frequency of Prolotherapy

- The frequency of prolotherapy varies depending on the abnormality / disease and its severity.
- In general, it is about 5 to 6 sessions with an interval of 1-2 weeks between injection sessions.

Side Effects of Prolotherapy

The solution injected is dextrose, so the side effects are minimal as it rarely interacts with other drugs that the patient may be taking. Even if the odds are low, here are some possible side effects:

- Infection at the injection site.
- Swelling / pain / redness in the injection site immediately after the procedure.
- Fever (if infection occurs)

It is possible for temporary side effects (e.g. swelling/pain) to occur immediately following the procedure, so the affected joint may feel worse before beginning to feel better.

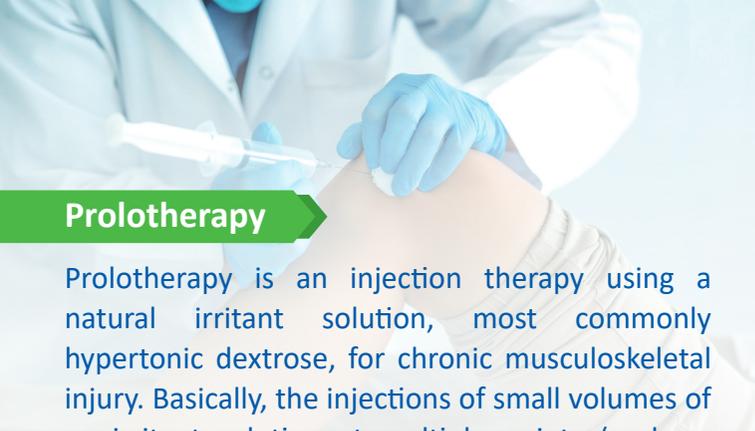


Sumber:

1. Rabago D, Patterson JJ, Mundt M, Kijowski R, Grettie J, Segal NA, et al. Dextrose Prolotherapy for Knee Osteoarthritis: A Randomized Controlled Trial. *Ann Fam Med* [Internet]. 2013 May 1;11(3):229 LP – 237. Available from: <http://www.annfammed.org/content/11/3/229.abstract>
2. Distel LM, Best TM. Prolotherapy: A Clinical Review of Its Role in Treating Chronic Musculoskeletal Pain. *PM&R* [Internet]. 2011 Jun 1;3(6S):S78–81. Available from: <https://doi.org/10.1016/j.pmrj.2011.04.003>
3. Reeves KD, Sit RWS, Rabago DP. Dextrose Prolotherapy: A Narrative Review of Basic Science, Clinical Research, and Best Treatment Recommendations. *Phys Med Rehabil Clin N Am*. 2016 Nov;27(4):783–823.
4. Fletcher J. What is prolotherapy and what is it used to treat? *Medical News Today*. 2017 Dec 17;

PROLOTHERAPY

Jl. H.O.S. Cokroaminoto 31-35, Menteng, Jakarta Pusat 10350
Tel. (021) 314 4989 - 314 0524 - 314 6621
24 Hour Clinic Appointment - 0818 0836 5588



Prolotherapy

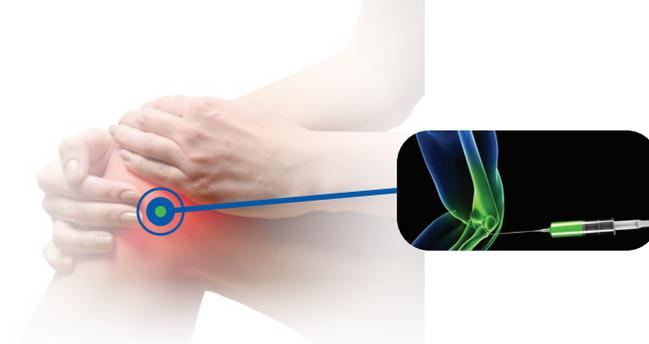
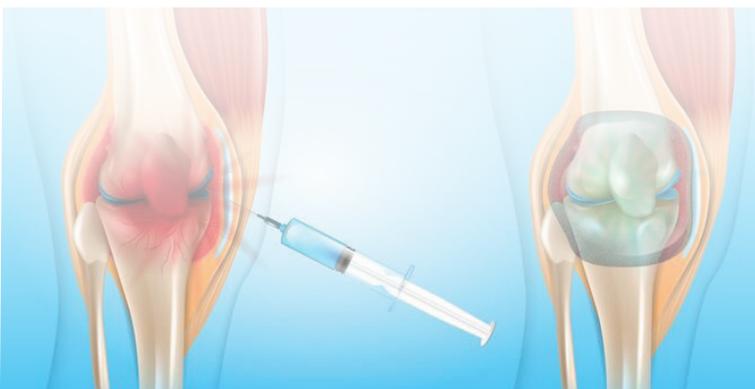
Prolotherapy is an injection therapy using a natural irritant solution, most commonly hypertonic dextrose, for chronic musculoskeletal injury. Basically, the injections of small volumes of an irritant solution at multiple points (such as ligament and tendon insertions, and in joint spaces) will trigger a local healing process in the injected area. The term prolotherapy comes from proliferant therapy which was commonly used in 1950.

Purpose of Prolotherapy

Prolotherapy is meant to reduce joint pain by injecting a natural irritant solution that induces a local healing reaction in the injected area so that the damaged tissues are repaired.

Safety and Effectiveness of Prolotherapy

Several studies have confirmed that prolotherapy is a safe and effective alternative to manage joint pain, other than medications. It can also be used in some medical conditions when it is not severe enough that surgery is necessary.



Because prolotherapy relies on the natural capability of the body to heal / regenerate itself, it is believed to improve joint stability and permanently repair joint functions. This is what differentiates prolotherapy from painkillers since painkillers are only temporary.



Medical Conditions Suitable for Prolotherapy

Several joint-related complains that can be treated with prolotherapy include



Low Back Pain



Hip Pain



Knee Pain



Shoulder Pain

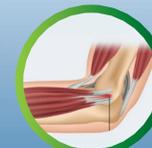


Other joint / ligament pain

The followings are some medical conditions commonly treated with prolotherapy:



Knee osteoarthritis



Tennis elbow



Tendonitis (inflammation of the tendon)



Rotator cuff injury



Arthritis

Mechanism of Action of Prolotherapy

- Prolotherapy involves an injection of irritant solution (like hypertonic dextrose) to the targeted joint area that cause pain.
- This solution will induce a temporary inflammatory reaction in the area.
- The inflammation in the injected area will cause a chemical reaction that leads to new cell growth and repair of the damaged joint / tendon / ligament.
- Along with the tissue repair (healing) process, the joint / tendon / ligament will become more stable and stronger, hence the pain disappears.