

# PROLOTHERAPY



## What is Prolotherapy?

Prolotherapy is the shortened version of “proliferative therapy”. It is the injection of healing substances into areas of tendons and ligaments near their attachments to bone. The most common solution used to trigger the healing process is concentrated dextrose (above 10%, typically 15-25%) which is sugar (glucose) in sterile water.

## What conditions will it help?

There are many conditions which may be helped by prolotherapy: arthritis, pain in any almost any joint in the body, migraines from neck pain, sprains from sports or other injuries, rotator cuff shoulder pain, tennis elbow, low back pain, etc.

## How does prolotherapy work?

A concentrated dextrose solution (or other proliferative agents) is injected into the tendon/ligament attachment and results in a short increase in inflammation in that area. This in turn results in inflammatory cells triggering a “healing cascade” of substances the body makes. Fibrin, collagen and other renewing substances form; result: healthy new tissue. This in turn “tightens” up the ligament or tendon so that it can do its job of supporting the joint properly; result: better function and less or no pain.

## How quickly does it work?

You may have some pain and stiffness over the next 48 hours. After that, the pain begins to lessen. However, healing continues long after the injection, which is why the appointments are spread out about a month apart.

## How often will I need to come?

Everyone is different and comes with a different condition and a different degree of pain. Some people occasionally only need one appointment. Others might need ongoing treatment as they gradually progress. The range is around 3-8 treatments.

## How many injections will I get at any one time?

This varies from person to person and will depend on the extent of the pain. But typically there are several injections at one visit, as all the painful areas of the affected joint(s) are treated.

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### Will it hurt?

Local anaesthetic helps to decrease the sensation of the prolotherapy injection. There is also some local anaesthetic included in the dextrose solution (as in “freezing” at the dentist), which quickly reduces local pain. Sometimes a pain medication or cream will be needed over the next 48 hours. We will do everything we can to make the injections as comfortable as possible.

### Are there any other solutions used in the injections?

Dextrose is very effective and is cheap, safe, and most often used. Platelet-rich plasma (taken from your own blood and concentrated) can also be used. This is more expensive and time-consuming but can be more effective in the relief of pain.

### Are there any risks associated with prolotherapy?

There are very few side effects or complications. However, you may notice some of these:

- Light-headedness (not serious) or nausea (rare).
- Bruising (not serious) and sometimes bleeding/oozing (stops with pressure).
- Brief “treatment stiffness” from the process of having an injection.
- Infection (very rare). Let us know if any of the sites become increasingly red or painful.
- Pneumothorax (extremely rare but serious). If you develop sudden shortness of breath or significant chest pain or major trouble breathing you should immediately go to the nearest emergency room.
- Temporary tingling or numbness from the medication is common, but it is very rare for any numbness to persist.
- A temporary increase in pain.

### What is the cost?

Prolotherapy is not an insured service with BC’s Medical Services Plan. The cost depends on the time required for the examination and injections, so please ask us about this. Typical prolotherapy treatments cost between \$250 and \$400.

# PROLOTHERAPY INFO SHEET

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### How will I feel after treatment?

Initially you should notice a decrease in pain and an increase in your range of movement. Then as the local anaesthetic wears off, you could well be stiff and a bit sore for a few days. Remember, we are trying to stimulate the inflammatory (and healing) cascade of substances in your body, so this is in fact a good thing. Don't plan on being too active for a day or two, to allow this process to have its maximum effect. Walking is fine. If you need some pain medication during this stage, we will advise you on what to use. Do not use heat or ice after treatment for the same reasons: we want to stimulate inflammation in the early stages.

### Practical Advice

- Bring a hair tie if you have long hair.
- Wear stretchy, easy to remove or loose-fitting clothes/sports clothes. A tank top and loose shorts are preferred.
- Wear dark clothes: they might get a little blood-stained.

### VERY IMPORTANT INFORMATION!

Prolotherapy (as mentioned in “how does prolotherapy work” above) causes a temporary inflammation in the tissues which is crucial in triggering the healing process. It is therefore very important not to take anti-inflammatory medication for a week prior and after the injections. Anti-inflammatory medication prevents the prolotherapy from working. These medications include the commonly available medications Motrin, Advil, Ibuprofen, Aleve, Naprosyn, Celebrex, and other similar pills. Also included would be full-strength Aspirin and Robaxisol, although baby Aspirin taken for the prevention of heart disease can be taken. It is OK to take Acetaminophen (Tylenol).