



# Platelet Rich Plasma (PRP) INJECTION

## Patient information

Platelet Rich Plasma (PRP) injections can provide long lasting reduction in pain associated with a range of degenerative joint and tendon problems such as joint osteoarthritis and tendinopathies. Improvements in pain can last up to a year. PRP is a safe and effective treatment. As with any invasive treatments, some people may experience side effects. The aim of this patient information leaflet is to provide you with the information to help prepare you for your injection.

### **What are PRP injections and how are PRP injections used?**

PRP involves the processing ('spinning') of a patient's blood to produce plasma which contains 3-5 times the normal number of platelets. PRP has been shown to help stimulate healing and repair within the tissues of the body.

The process requires some blood to be taken from a patient (usually a vein in the arm) which is then spun very quickly in a specialist piece of equipment known as a 'centrifuge'. This causes the blood to separate into a range of parts depending upon thickness and weight.

PRP injection treatment is a process whereby the PRP is injected into the site of injury in order to trigger the body's natural healing mechanisms.

Research has consistently demonstrated that this enriched PRP has a regenerative effect on the tissues of the body by triggering natural healing processes. PRP injections are delivered under ultrasound guidance to the area (normally a joint or tendon) of pain to ensure that the PRP reaches the exact area to be treated.

PRP injections are often recommended for people with osteoarthritis of the knees and other joints. They can also be used in a range of other soft tissue conditions such as tennis elbow and plantar fasciitis which involve pain and degenerative changes identified on scans.

Most research shows that a series of 3 PRP injections each 1-2 weeks apart provides the best outcome. Therefore, we typically offer treatment programmes consisting of 3 PRP injections.

## **What happens when I book for a PRP injection?**

First, the clinician who will be performing your injection will give you a call to discuss the procedure and make sure it's the correct treatment for you based upon your condition and symptoms. They will also screen you for any medical conditions which would prevent you having the treatment. There are a few things you also need to be aware of in preparation for the day of the treatment such as keeping yourself well hydrated.

For safety reasons your clinician may recommend delaying your injection until they have discussed your treatment with your GP if there are any concerns regarding your general medical condition.

## **What happens on day of the appointment?**

The appointment will last around 45 minutes in total. First the clinician will draw some blood, usually from a vein in your arm. Then the PRP needs to be prepared by spinning the blood in the centrifuge which takes around 10 minutes. The clinician will then inject the PRP using ultrasound guidance into the joint or tendon to be treated. An ultrasound scan is used to assess the condition of the joint or tendon and also to deliver the injection accurately. Most injections are quick and easy to perform. You will be asked to remain in the clinic for 20 minutes following the injection to allow observation of possible adverse reactions.

## **What happens after the injection?**

It is normal for the patient to experience more pain for 1-2 weeks after the injection. This is known as 'post injection flare' and is usually nothing to be concerned about. We try to avoid the use of local anaesthetic if possible so the injection site itself can feel a little sore for a day or two.

You may wish to consider arrangements for getting home after your injection because the joint or tendon can be painful and it may not be appropriate or practical to drive home.

Please also consider your planned activities for the first few days after the injection, particularly with the potential risk of post injection flare. We recommend that patients have the option to rest for 5-7 days after the injection. Try to avoid strenuous exercise for first 5 days after the injection even if feeling comfortable. If you are having an injection around a tendon, you may be asked to avoid heavy impact and loading activities for two or three weeks. Injections around tendons are more likely to have pain after the injection.

## **How many injections will I need?**

We usually treat using a series of 3 PRP injections, each injection is 2 weeks apart from next. If you are still experiencing post injection flare at 2 weeks we would postpone for a further 2 weeks before the next injection.

## **Will I need further PRP treatment in the future?**

If you find the programme of PRP injections helpful, the treatment may be safely repeated. The effects of PRP have been shown to last around 1 year. Some patients therefore may wish to have a series of 3 PRP injections every year or so if they are finding them helpful.

## **Possible risks and side effects**

Most people have PRP injections without any side effects. There have been no reported serious side effects in any research papers or clinical trials.

The main side effect is pain after the injection as discussed above. Other risks and side effects are extremely rare and are listed at the end of this leaflet. If you would like to discuss any of these further please contact your treating clinician prior to the appointment. You will also have the opportunity to discuss in further detail on the day of your appointment.

## **Are there any medical conditions whereby PRP Injections cannot be given (contra-indications)?**

- Haemophiliac disorders
- Joint replacements
- Taking anti-coagulant medications (see below)
- Local Infection
- Malignancy

## **Will it hurt?**

The procedure may feel a bit uncomfortable. The taking of the blood and the injection may feel a bit sore at the time, however most people tolerate it very well. There may be pain at the injection site for 1-2 days after the injection. Post injection flare can last 2-3 weeks.

## **Infection**

Very rarely, you may get an infection in the joint at the time of injection (this is thought to occur approximately 1:50,000 injections). If the joint becomes very painful and hot, you should seek medical attention immediately, especially if you are also feeling generally unwell. You may require antibiotic treatment.

## **Other possible side effects**

Some injections may cause trauma to local tissues. However, the injection will be performed under ultrasound guidance by a highly experienced clinician so this would be a very rare complication and every effort is always taken to avoid any trauma to nerves or vessels.

## **Can I take other medicines along with the steroid injection?**

You can take other medicines with PRP injections, however, we recommend to avoid use of NSAIDs (non-steroidal anti-inflammatory drugs such as ibuprofen or naproxen) for 1 week prior to the injection and for 4 weeks afterwards. This is because NSAIDs may reduce the treatment effect of the PRP injections.

## **Risks of complications with other medications**

If you are taking a blood thinning drug (also called anti-coagulants) such as warfarin, you may need a blood test to make sure that your blood is not too 'thin' to have the injection. This is because of the potential risk of bleeding into the joint.

You therefore must tell the clinician giving the injection if you take anti-coagulants as they may need to discuss this with your GP before giving you the injection.

## **Pregnancy and breastfeeding**

We are not able to offer PRP injections to patients who are pregnant or breastfeeding. There is a lack of research into this area in order to robustly demonstrate that it is safe and entirely without risk.

## **Below is a summary of the risks or potential side effects of PRP injections**

Serious side effects are rare and include:

- Joint and soft tissue infections. This is extremely rare (approximately 1 in 50,000). If you notice your joint has become red, hot and swollen, and also feel unwell, please seek urgent medical attention)
- Anaphylaxis (due to contact with materials used during the injection procedure rather than the PRP itself). This, again, is extremely rare (approximately 1 in 5,000,000)

Other potential side effects include:

- Post injection flare of pain at injection site. This is fairly common (1 in 3).
- Pain and bruising at injection site and / or where blood is drawn from the arm.
- Dizziness and nausea at the time, or following the injection. This is usually very minor and settles quickly.
- Injury or trauma to nerves or blood vessels during the injection procedure.