

Ultrasound Guided Platelet Rich Plasma Injection (PRP) in Radiology

Patient Information

Wrightington Radiology Department



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Why have I been offered this treatment?

Your Consultant has diagnosed a condition involving wear and tear/degeneration to your tendons and/or joints which are involved in the movement of your hips and knees. The aim of this injection is to try to reduce the need for any surgery, whilst also helping to reduce your levels of discomfort, pain and improve function for you to enjoy the activities you wish to do normally.

What is involved?

An ultrasound-guided Platelet Rich Plasma (PRP) injection is a procedure that is used to treat longstanding tendon wear and tear (degeneration) or small tears, as well as joint pain, particularly when other treatments such as physiotherapy alone or steroid injections have been unsuccessful. This is not a first line treatment and the decision to try this has been made by your Consultant Orthopaedic Surgeon and the Consultant Musculoskeletal Radiologist. Unlike a steroid injection which tends to work more quickly in the short-term, you should not expect to see improvement with PRP injections for several weeks to months, due to the medium-to-long term nature of this treatment strategy.

The principle of the procedure is that the area of the tendon/joint, which is worn, is injected with some of your own platelets; the parts of your blood that contain higher concentrations of proteins called growth factors which over a period of time, help to promote cellular replacement & regeneration, and healing of tissues. This would then help over a period of time to reduce any pain and discomfort by treating the underlying problem. To obtain the platelets for the injection, you will need to have a blood sample taken. This will usually be done by one of our Radiographers and is similar to having a blood test. Your small blood sample is then spun in a centrifuge machine that helps to separate the blood into different layers so that the PRP layer can be extracted and prepared for injection into your affected tendon or joint.

Who will be doing the injection procedure?

The procedure takes place in the X-ray/Radiology Department, where a specially trained Doctor (Consultant Musculoskeletal Radiologist) injects the PRP into your tendon or joint with the help of Ultrasound guidance.

The Procedure under ultrasound guidance

Using ultrasound ensures this injection is accurately directed and placed into your tendon or joint and ensures that you get maximum benefit. You will be lying down on a couch either on your back, side or front depending on the area to be injected. The injection technique is performed under sterile conditions, meaning your skin will be cleaned and all kit used is new and sterile to minimise any small infection risks. The ultrasound probe will be used to visualise the area to be injected and you will be given a small injection of local anaesthetic under the skin near to the affected area. Once the anaesthetic has taken effect, the PRP will be injected into predetermined points in the tendon or joint. A dressing is applied once the procedure is completed. You should keep this dry and leave it on for at least 24 hours.

What can I expect to feel during and after the procedure?

The initial injection of local anaesthetic numbing the skin will feel like a sharp scratch or sting. Once the area is numb, the PRP will be injected. You may experience a sensation of pushing and pressure and possibly a little discomfort or throbbing sensation. These symptoms should resolve quickly.

Is it safe?

The risks of this procedure are very small, and it is a very safe procedure. Other than a small amount of local anaesthetic, the only other injected product is the platelets from your own blood.

Any injection carries a very small risk of infection. If the area becomes swollen, painful, and red, or you feel unwell and feverish, then you must attend your nearest Hospital Emergency Department and seek a precautionary review to exclude any developing infection. If an infection does occur, it will need treating urgently, possibly with a washout of the area and a course of intravenous and/or oral antibiotics.

The procedure also presents a small risk of bleeding. You should highlight to the Radiology Department if you are taking any blood thinning medications as it can slightly increase the risk of bleeding after the procedure but should not stop you from undergoing it. The most common blood thinners include Warfarin, Dabigatran, Apixaban, Rivaroxaban, Tinzaparin, Enoxaparin, Aspirin or Dalteparin.

You will also be asked to stop taking non-steroidal anti-inflammatories medicines for at least 10 days after your injection. If you do use anti-inflammatory medicines, with common ones such as Ibuprofen, Naproxen and Diclofenac during this time, it could potentially reduce the effectiveness and success of the injection.

What should I do prior to the procedure?

Please take your normal pain relief medicine one hour prior to your procedure. On the day of your procedure, please inform the x-ray staff of any allergies you may have.

What happens after the procedure?

Some people do have moderate discomfort during the injection, which can continue for a short while after the procedure. You may get some bruising where you had the injection, and the numbness of the skin will last for several hours. You are advised to stay in the X- ray department for 10 -15 minutes before you are discharged home.

Most people will feel completely back to normal after a short while and you are usually back in work the next day if your job is low impact; although you would be wise to take longer if you have a heavy or very active job. The Consultant Radiologist will discuss these points with you further before proceeding.

We advise you where possible to attend your procedure with someone else like friends or family, who can drive you home after the procedure. We recommend that you do not drive or operate heavy machinery for the rest of that day following the injection. This is for your comfort and safety.

Does it work?

The use of PRP for your condition does not have enough long term, independent evidence to measure its overall success at the time of this publication. There is however growing evidence in its use and its success, but this can only be validated further with continued research. As you may have tried other treatments and continue to have symptoms, your Orthopaedic Surgeon has recommended that you try PRP, as they feel you may get some relief from this procedure. The Wrightington Radiology department has been performing this procedure for several years now and as well as receiving positive verbal feedback from patients and clinicians alike, our internal audits and research have also shown improvements in certain conditions that are treated. The department continues to review and research this procedure going forwards.

What if it fails?

Your Consultant will discuss further options with you and these are dependent on your individual circumstances.

How will I be followed up?

You will be sent an appointment to be followed up by your Orthopaedic Surgeon in the Outpatient Department in due course.

Queries or concerns

Your Orthopaedic Surgeon will be able to answer any queries you may have. You can also telephone the Radiology Department on 01257 256212.

Comments, Compliments or Complaints

The Patient Relations/Patient Advice and Liaison Service (PALS) Department provides confidential on the spot advice, information and support to patients, relatives, friends, and carers.

Contact Us

Tel: 01942 822376 (Monday to Friday 9am until 4pm)

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Ask 3 Questions

Become more involved in decisions about your healthcare. You may be asked to make choices about your treatment. To begin with, try to make sure you get the answers to three key questions:

- 1. What are my options?
- 2. What are the positives and negatives of each option for me?
- 3. How do I get support to help me make a decision that is right for me?



How We Use Your Information

For details on how we collect, use, and store the information we hold about you, please see patient information leaflet, Ref. **Corp 006** How we use your information, this can be found on the Patient Information Leaflets page on the Trust website, see details on the front cover.

This leaflet is also available in audio, large print, Braille, and other languages upon request. For more information, please ask in the department/ward.

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