



## What is an Autologous Blood Patch Injection?

Autologous Blood Injection (ABI) involves injecting a patient's blood into a damaged part of the body.

Blood contains many nutrients and substances which are thought to promote healing. Platelets are tiny cells in blood, which stick to each other when we cut ourselves to result in the formation of a clot to stop any further bleeding. Platelets contain many powerful growth factors, in particular Platelet Derived Growth Factor (PDGF), which has been shown to promote healing of many types of tissues, including bone, teeth, skin and the tissue lining our eyes. PDGF also promotes healing of tendons, which are damaged due to excessive use and/or the ageing process.

At Exact Radiology Clinics this injection is most commonly performed into a tendon for the treatment of a tendon tear, although includes other applications such as injecting ligaments, muscles and joints. Any tendon in the body may be injected with a patient's blood products but it is most often used to treat tears of the common extensor tendon of the elbow ('tennis elbow'). Approximately 80% of patients obtain complete or significant pain relief following this procedure.

## What should I expect when I have my procedure?

You will be asked to lie on an examination bed with the area of clinical concern exposed. The risks and possible complications will be discussed with you prior to the procedure and with your acceptance we will proceed.

Blood is usually taken from a vein on the back of the hand or just below the elbow. The skin over the area is cleaned with an antiseptic swab and a tourniquet is tied around the arm, retaining blood within the arm and making the veins more visible. The Radiologist feels the veins in order to select an appropriate one. When a vein is selected the Radiologist inserts a needle into the vein and releases the tourniquet. The appropriate amount of blood is taken and the needle is withdrawn from the vein. This is much like a normal blood test.

The area of clinical interest will then be cleaned with a hospital grade antiseptic wash and injected with a small amount of local anaesthetic. Once the area is anaesthetised, the body part to be injected is then located using the relevant radiological equipment (such as ultrasound or CT). By locating this area with radiological guidance we can ensure that the mixture of blood and Corticosteroid is delivered in precisely the correct location therefore offering the best chance of a positive outcome.

A fine needle is then directed into the area of clinical interest and the Radiologist will administer the blood collection. The Radiologist will usually then inject 1ml of Corticosteroid into the surface of the tendon. This is done to support the reduction of tendon inflammation over the coming month as the blood begins to heal the tendon tear. Once the procedure is complete our Radiologist will discuss post-procedural care with you.

## What does Exact Radiology recommend for my post-procedural care?

Refrain from any significant activity involving the body part for one week. Necessary activities of daily living are permissible, but do not engage in any deliberate exercise such as running, weight training or other sporting pursuits.



Some discomfort may occur following the procedure, Paracetamol and a cool compress may help. If the pain is severe, anti-inflammatory medications are particularly helpful. This pain flare is usually most prominent in the first three days following the procedure and slowly decreases. If you are concerned, please phone the Exact Radiology Clinic where the injection was performed.

Exact Radiology Clinics recommend that you discuss your post procedure rehabilitation options with your Health Care Professional eg. physiotherapy treatment program.

## Are there any risks or side effects from my procedure?

As with all medical procedures there are risks. A skin infection or infection of the deep soft tissues is a risk. No recorded tendon ruptures have been documented in the scientific literature nor has this been our experience to date. Patients have reported their pain flaring up in the first week following the procedure, this can be normal and in most cases is controlled with some Paracetamol or anti-inflammatory medication.

## How should I prepare for my procedure?

When you phone to arrange your appointment one of our friendly reception staff will advise you of the preparation and requirements for this procedure. We will also need to know if you are currently on blood thinners such as Warfarin or Aspirin.

**Blood thinning medications that you are currently taking should be ceased prior to this procedure. This should be discussed with your Health Care Professional prior to making your appointment.**

(Aspirin and Warfarin for 5 days, Plavix for 7 days and Iscover for 8 days). If you have had a heart valve replacement, it may be necessary to take antibiotics before the procedure. Please discuss this with your Cardiologist/Cardiac Surgeon and take antibiotics as directed.

## Things to bring along to my appointment:

- Previous films for area of clinical interest.
- Medicare or Department of Veteran Affairs card (as we Bulk Bill all eligible Medicare services).
- Workcover details and claim number (if this is a Workcover claim).
- Referral (this is a legal requirement).

*[Last Updated: 17/08/2010]*