

Autologous Blood Injection (ABI) harnesses the healing properties of blood in order to reliably treat pain arising from tendons, ligaments and muscles. With excessive use and increasing age, pain arising from tendons is becoming more prevalent, particularly in active “baby boomers”. Prior to any proposed ABI, an accurate diagnosis must be made, which usually requires a test such as an MRI or ultrasound scan of the body part to confirm that the specific tendon, ligament or muscle is the source of the patient’s pain. Once referred for an ABI, the radiologist at Melbourne Radiology Clinic will then review the patient and discuss the ABI procedure and rehabilitation.

ABI is most commonly used for the treatment of diseased tendons, commonly known as *tendinitis*. The medical term for this is *tendinosis* or *tendinopathy*. With increasing severity of tendinosis, partial thickness tears may form, which if left untreated can result in a full thickness tendon tear. The tendinosis-tear process is simply an increasing spectrum of injury to the tendon. Any tendon can be treated with this procedure and though not used routinely, the procedure may also be used in muscle and ligament tears (“strains and sprains”).

The procedure of ABI involves withdrawing whole blood from the patient, usually taken from the patient’s elbow or forearm, and then injecting it into the area of maximal abnormality of the tendon using a machine called an ultrasound for guidance. Ultrasound guidance is used to ensure that the blood is delivered precisely and safely to the area concerned. Platelets, small cells found in blood which are involved in clotting, contain “alpha granules” which release substances such as platelet derived growth factor (PDGF) into the tendon and commences a cascade of natural healing. Though dependant on the severity of the underlying tendon disease and the length of symptoms, approximately 80% of patients, will obtain complete or significant relief of their symptoms.

POST PROCEDURE INFORMATION

This information is for patients who have undergone an ABI (Autologous Blood Injection) at Melbourne Radiology Clinic.

Following this procedure, please be advised of the following recommendations:

- 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.
- A moderate amount of discomfort is expected due to the process of inflammation and is how the procedure provides benefit. Inflammation results in repair of the damaged tissues into which the blood has been injected, however also causes swelling and pain. As such, paracetamol and a cool compress may help.

If the pain is severe, anti-inflammatory medications are particularly helpful. This pain flare is usually worse in the first three days following the procedure and slowly decreases. If you are concerned, please call our clinic to discuss your specific situation and our doctor is only too happy to discuss this with you further.



- **After the first week**, you are advised to commence a **three week program of rehabilitation** under the supervision of a physiotherapist, concentrating on stretching and eccentric exercises. You may already have a physiotherapist that has assisted you in the past. If not, we can recommend one to you. The rehabilitation is low intensity at the start, gradually increasing depending on your pain and general progress and is at the discretion of your physiotherapist.
- At this point, it will be *four weeks* following the injection (*1 week rest* followed by *three weeks of a graduated rehabilitation and exercise program*).
 - If you have no more pain, then no further action is required.
 - If your pain has decreased but pain remains, then a second injection is recommended.
- If you have had NO benefit, a repeat injection is recommended. There are many patients that only respond after a second injection.
- If a second injection is performed, then the rehabilitation program as for the first injection is repeated. If you have had relief at this point but pain persists, then a further injection may be performed.

If you have had no benefit after this, then you are unlikely to respond to a repeat injection. A different type of injection however may provide you benefit, such as prolotherapy or polidocanol (see www.melbournerradiology.com.au for further information). Unfortunately, it is not possible to determine which patients will benefit from which type of injection. Melbourne Radiology Clinic uses blood products as its *first line of treatment*, based on recent studies published in the scientific literature that this will most likely provide you with pain relief. The doctor at Melbourne Radiology Clinic is available to discuss other radiologically guided procedures to treat your condition should you wish to pursue further treatment.

Follow up

The radiologist conducting the injection will send your referring doctor a report.

- Please ensure that you make a follow up appointment with your referring doctor or health care provider to discuss your results.

REMEMBER ...

- Please bring to the clinic any prior scans (eg. X-rays, ultrasounds, MRI, CT) and reports as these will assist the radiologist in assessing your condition.
- If you have any further queries please call Melbourne Radiology Clinic on **(03) 9667 1667** - we are only too happy to help.
- Please note that any referral for a scan is valid at Melbourne Radiology Clinic, even if it has been written on a referral form from another radiology provider.

Whilst every effort is made to keep your appointment time, the special needs of complex cases, elderly and frail patients can cause unexpected delays. Your consideration and patience in these circumstances is appreciated.

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