

## Autologous Blood Injections

### What is an autologous blood injection?

*An Autologous Blood Injection (ABI) involves injecting a patient's blood into a damaged tendon or musculotendonis junction. The ABI harnesses the healing properties of blood in order to treat pain arising from tendons, ligaments and muscles.*

### What is the purpose of an autologous blood injection?

*An ABI is most commonly performed for tendinosis, though other applications also include injecting ligaments, muscles and joints. 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. The most frequent uses include common flexor origin ("golfer's elbow" or medial epicondylitis) and common extensor origin ("tennis elbow" or lateral epicondylitis), Achilles (ankle), gluteal (hip), hamstring (buttock), patella (knee) and plantar fascia (heel).*

### Why inject your patients own blood?

*Blood contains many nutrients and substances which promote healing. Platelets contain many powerful growth factors, in particular PDGF (Platelet Derived Growth Factor) which has been shown to promote healing of many types of tissues. PDGF also promotes healing of tendons which are damaged due to excessive use and/or the ageing process.*

### How many injections are needed?

*Approximately 70-80% of patients obtain complete or significant pain relief from a single procedure, 20-30% may benefit from a second treatment. If your symptoms have not completely cleared in 4 weeks, a further injection 5 to 6 weeks after the initial injection may be performed. A third injection is rarely offered and other treatments would be considered if 2 ABI treatments did not work.*

### What is Involved?

*Blood is taken from the patient's arm (like a routine blood test). In general 2-5mls of blood is taken depending upon the size of the tendon to be injected. The blood is mixed with local anaesthetic before the procedure. Using a sterile technique the mix of local anaesthetic and blood is then injected using ultrasound or fluoroscopic guidance into the area around the damaged tendon.*

### Risks and possible problems

*Pain often flares in the first week after the injection and can be controlled with ice, elevation (relative rest), paracetamol and/or ibuprofen. There is a small chance of infection, bleeding and injury to structures near the tendon and bruising at the injection site.*

### What should I worry about?

*Although side-effects are uncommon if redness, swelling, fever, chills, increased pain occurs you may be developing an infection and should seek medical attention.*

### Post Injection Care.

*Following the procedure you should avoid strenuous activity involving the body part for 1 week and then gradually return to normal activity and a graded exercise program over the next 3 weeks. (Necessary activities of daily living are permissible, but do not do any sport, gym training running or vigorous activity.) Expect some discomfort/pain. The inflammatory response heals the damaged tissues into which the blood was injected. Paracetamol, cool packs and anti-inflammatory medications may be helpful.*