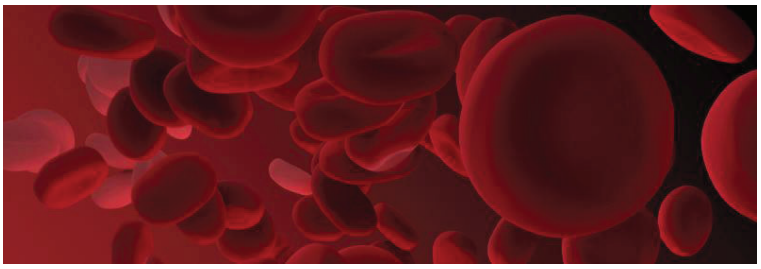

Autologous Blood Injections

Tendinopathy is the name for a range of conditions that affect tendons – the connective tissue that connects muscle to bone. These conditions can cause pain, weakness and stiffness. The most common tendons affected are in the elbow, the heel and the knee.

There are a variety of treatment options available to people with tendinopathy. The mainstay of treatment is a progressive eccentric strengthening program. Autologous blood injections are an adjuvant treatment which can be used to help assist the tendon to heal. The idea is that the blood contains growth factors and other substances which promote a healing response. Essentially we are artificially creating a bruise about a tendon which has failed to heal and attempting to stimulate tendon healing. We have used these injections over the last five years and have had some good success with them.

What is Involved?

Blood is taken from the patient's arm (like a routine blood test). In general 2-5mls of blood is taken. The blood is mixed with local anaesthetic before the procedure. Using a sterile technique the mix of local anaesthetic and blood is then injected into the area around the damaged tendon. Patients are encouraged to take some simple pain relief - paracetamol or ibuprofen - and to ice the area following an injection. The injection is often repeated a month after the initial proceedure.

How well does the procedure work?

Anecdotally this procedure works well to treat tendon pain. Between us we have performed approximately 1000 autologous blood injections. There is also some limited scientific evidence to support the use of this technique. In one study pain was assessed in 15 patients who were injected with their own blood and 5 who were just injected with anaesthetic. After 8 weeks the pain had decreased by 60% in the blood injection group and by 16% in the anaesthetic group. At just over 2 years, pain in the group injected with their own blood had decreased by 93%.

Three studies involving a total of 83 patients treated for ‘tennis elbow’ also looked at the severity of pain. On a scale from 1 (mild pain) to 7 (worst pain), pain scores decreased from 6 to 0 or 1 at 6 months and from 6.5 to 2.0 at 9.5 months after patients were injected with their own blood.

Two other studies have also illustrated an imporovement in other tendons. Knee function improved in a group of 44 patients (47 knees) who had problems with their patella tendon. In another study of 15 patients, elbow function had improved by 72% 6 months after the procedure.

Risks and possible problems

Pain was one of the main problems reported. In one study of 35 patients, 25 had pain and stiffness after the procedure, which went away within 2 days. Most patients reported that the pain was similar to the pain they had after steroid injection. Other potential complications include infection, injury to structures near the tendon and bruising at the injection site.