

## **Ultrasound scan with or without injection**

An ultrasound scan is a relatively quick and the most efficient way to assess the tendons around the shoulder joint. It is used to dynamically assess the all the tendons of the shoulder and to help in the diagnosis of common disorders including impingement syndrome, rotator cuff tendon tears and calcific tendonitis. It is also used to guide steroid injections precisely in the desired place, at the same time if required.

There is no preparation required for the scan. The procedure takes 15- 20 min and will be performed by a specialist shoulder radiology consultant. It will help if you can wear clothing that will allow you to easily expose the shoulder in question. You will be asked to strip to the waist and to change into a gown. Bras can be left on but with the strap on the affected side down. During the ultrasound scan you will be covered except the shoulder in question. A layer of water based gel will be spread over the skin to ensure good contact between the shoulder and the ultrasound probe. Different tendons are examined while placing your arm in different positions. Following the examination, the ultrasound findings can be discussed with you.

When steroid injection is planned, the radiologist will do the injection under ultrasound guidance. The needle position is always precise as the needle is watched constantly while guiding it into the desired location. The correct position is thus achieved with relative ease and no needle manipulations are required 'to find the spot', making the injection as painless as possible. The injection site will be covered with a small dressing which can come off in the next 24 hrs.

Most people are able to drive after an injection, however if the shoulder joint is quite painful and stiff before the injection, it might be best to arrange someone to drive you home.

The steroid injection is a very safe drug with approval for use in joints. It can be used safely with other conditions with no significant drug interactions. The injection is precisely injected and works on the injected area only. It has no general effects and does not put you at risk of putting on weight. Even if you are on oral steroids, there is no need to change your dose. However, if you are a diabetic and take insulin, it may affect your blood sugar levels initially.

Side effects are very rare and include-

- Skin thinning, dimpling and change in skin colour at the site of injection.
- Flushing and redness of the face for a few days. It is more of a nuisance rather than reaction and usually settles down over a few days.
- The area of injection may look or feel bruised for a few days.
- Infection is a very unusual complication which can occur from any kind of injection. If the injection area become red, hot and swollen and you feel unwell you should seek immediate medical help.
- Serious or breathing related side effects are not expected with this injection and if such symptoms are encountered, you should seek immediate medical help via a GP or emergency department.

After your study the report is forwarded directly to Mr Smith, who will arrange to see you accordingly.