Wrightington, Wigan and Leigh Teaching Hospitals
NHS Foundation Trust

Hydrodilatation for frozen shoulder

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Hydrodilatation for Frozen Shoulder

Patient Information

Radiology Services

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Why have I been offered this treatment?

Your specialist has diagnosed a frozen shoulder (adhesive capsulitis) which is a painful condition that causes reduced movement of the shoulder joint.

What is involved?

Hydrodilatation is a procedure that aims to improve the movement of the shoulder joint and decrease pain in the shoulder. It involves stretching the capsule of the joint and reducing the inflammation within it by injecting a mixture of sterile saline, local anaesthetic and steroid.

Who will be doing the procedure?

A specially trained doctor known as a Radiologist performs the procedure in the X-ray department using X-ray or Ultrasound guidance to ensure the injection is accurately placed.

The Procedure

X-Ray guidance

You will be asked to lie on your back with your arm extended out to the side. The skin will be cleaned, and the shoulder covered with a sterile drape.

The Radiologist will then inject under the skin with local anaesthetic to numb the area. A fine needle will then be introduced onto the surface of the shoulder joint under X-ray guidance and a small volume of X-ray dye (contrast iodine) will be injected to ensure correct positioning.

Ultrasound guidance

Under certain circumstances the procedure is performed under ultrasound guidance, and the patient will be sat on a chair, or lying face down on a bed, the injection will be into the back of the shoulder.

Around small volume of saline, steroid and further local anaesthetic will then be injected through the same needle to stretch the joint capsule.

The procedure itself takes around 15 minutes.

What can I expect to feel during and after the procedure?

The initial injection numbing the skin will feel like a sharp scratch. Once the area is numb you should feel very little. There may be a sensation of pushing and pressure. If you feel discomfort, you must tell the doctor. Occasionally people have described a feeling of excess fluid in the shoulder. These symptoms should resolve quickly.

Is it safe?

The risks of this procedure are very small as it is a very safe procedure.

There is a very small risk of infection, as with any joint injection. If your shoulder becomes swollen, painful and reddened, or you feel unwell and feverish, then you must attend your nearest hospital Emergency Department to ensure you have not developed an infection.

If a joint infection occurs, it will need treating in hospital urgently, possibly with a joint

washout and a course of intravenous and oral antibiotics.

There is a small risk of bleeding. You must inform the X-ray department immediately if you are taking any blood thinning medications such as Warfarin, Dabigatran, Apixaban, Rivaroxaban, Tinzaparin, Enoxaparin or Dalteparin.

Diabetics should carefully monitor their blood sugars for the first 48 hours after the procedure as blood sugar levels and insulin requirement may rise due to the steroid injection.

It is possible to be allergic to the steroid, which may result in a red, itchy rash developing 1-2 days after the procedure and lasting up to a week. A severe allergic reaction (anaphylaxis) to the iodine contrast is very rare.

What should I do prior to the procedure?

Please take your normal pain relief medicine one hour prior to your procedure. On the day of your procedure, please inform the nurse or doctor of any allergies you may have.

What happens after the procedure?

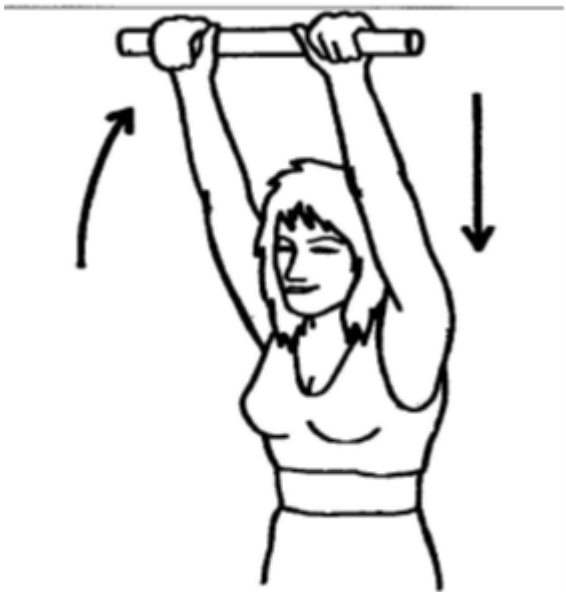
Some people do have moderate discomfort, which can last for thirty minutes after the procedure. You may get some bruising where you had the injection, and the numbness of the skin will last for several hours. You will stay in the X-ray department for 15-30 minutes before you are discharged home.

Most people will feel completely back to normal after 24 hours and are usually back in work the next day.

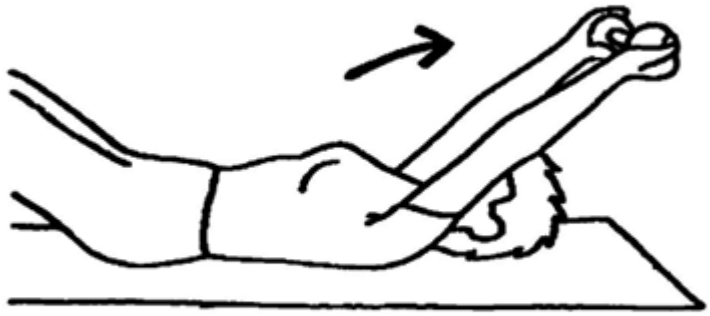
Please bring along someone to drive you home after the procedure, as we would advise that you do not drive or operate heavy machinery for the rest of that day following the procedure as you may not be insured by your insurance company.

You must continue physiotherapy after the procedure, and we would recommend you see your Therapist within approximately 1 week from the procedure.

You will need to do the following exercises to maximize any increased movement gained during the procedure:



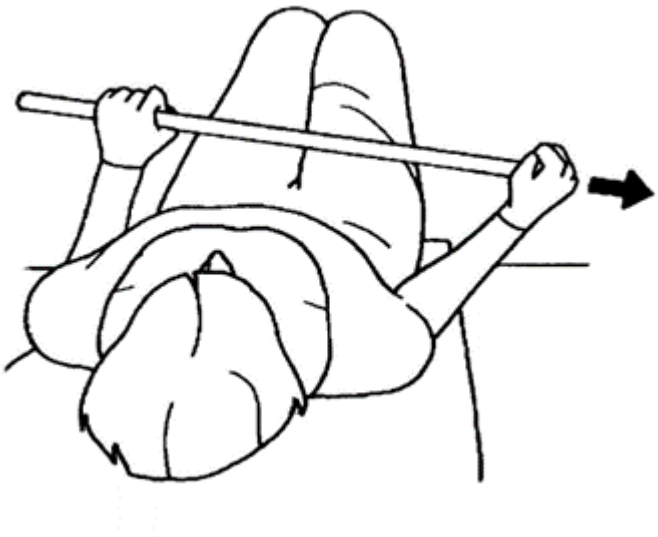
- Stand or sit holding a pole/stick with your arms down and in front of you.
- Lift arms straight out in front of you. You can use your un-operated arm to assist lifting the stick.
- Repeat 10 times.



- Lying on your back with knees bent. Hold the pole/stick in both hands and rest it on your stomach.

- Lift your arms up straight as if going over your head. Return to starting position.

- Repeat 10 times.



- In lying or sitting holding a stick. Keep the elbow of the operated arm into the side and use the stick to push your operated arm out to the side keeping your elbow against the body.

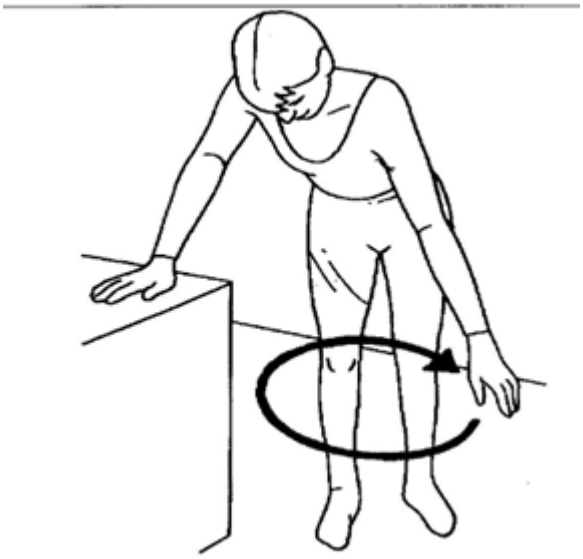
- Repeat 10 times.



- Stand and grip one end of the stick with the arm to be exercised.
- Lift the stick up sideways by assisting with the other arm.
- Repeat 10 times.



- Stand holding a stick behind your back with your elbows straight. Lift the stick upwards away from your body.
- Repeat 10 times.



- Bend forwards. Allow the arm to hang down from the shoulder. Carry out circular movements.
- Repeat 10 times.

Does it work?

Nationally, there is a reported success rate of over 70% in improving the movement of the shoulder and over 90% in improving pain. Some people may get immediate relief, but for others it can take several weeks to achieve full benefit. It is important to stress that improvement will only be achieved if accompanied by physiotherapy following the procedure.

What if it fails?

Your specialist will discuss the option of keyhole surgical release (arthroscopic capsular release) or manipulation under anaesthetic (MUA).

How will I be followed up?

You will be seen by a Physiotherapist 3-5 days afterwards and your consultant will see you at approximately 6 weeks in the Outpatient Department.

Queries or concerns

Your specialist will be able to answer any queries you may have. You can also telephone the Radiology Department on 01257 256212.

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