Arthroscopic Release of a frozen shoulder
Physiotherapy Department

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What is a frozen shoulder?
A frozen shoulder is a disorder of the shoulder capsule, a thin tissue which surrounds the shoulder joint. The capsule becomes inflamed and stiffens causing restricted movement and pain.

What causes a frozen shoulder?
A frozen shoulder can be a pathology known as idiopathic (pathology arising from no known cause). Patients with Diabetes, previous stroke, rheumatoid arthritis and previous shoulder injuries, particularly fractures, are more likely to develop a frozen shoulder. It affects approximately 2% of the population and typically affects those in the age bracket of 40-60 years of age. It is more common in women than in men.

What happens in a frozen shoulder?
The progression of a frozen shoulder can be divided into 3 stages:

1. **Freezing stage**
2. **Frozen stage**
3. **Thawing stage**

The freezing stage results in high pain levels with a gradual reduction in range of motion. It can last for up to 9 months.

The frozen stage involves improvement in pain sensation but range of motion remains limited with increasing difficulty carrying out activities of daily living. This can last for up to 6 months.

The thawing stage sees a slow and progressive improvement in range of motion.

The whole process typically lasts from 18 months to 2 years.

When can I return to normal activities?
Following discharge from hospital it is not necessary for you to wear a sling and it is important to use the shoulder rather than protect it.

You should be able to return to driving once the effects of the anaesthetic have worn off however pain levels may prevent you from doing so and therefore this may take two weeks before being able to return.

You should be able to return to work within two to three weeks depending on the type of work that is to be carried out. Physical work may be up to six weeks before the shoulder is ready to return to this.

You should avoid aggravating your shoulder in the initial few weeks post-operatively. It is important to remember that following surgery your shoulder will be inflamed and it is important that you do not continue to exacerbate the signs of inflammation. Therefore it is advised to avoid heavy lifting (including gym based exercises) for six weeks.

Further Information
We endeavour to provide an excellent service at all times, but should you have any concerns please, in the first instance, raise these with the Matron, Senior Nurse or Manager on duty. If they cannot resolve your concern, please contact our Patient Experience Team on 01932 723553 or email patient.advice@asph.nhs.uk. If you remain concerned, the team can also advise upon how to make a formal complaint.

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a. This is very rare due to the arthroscopic procedure but can occur at the operation site or in the shoulder.
b. If you suspect this to be the case contact your local GP as you may require a course of antibiotics

4. Bleeding
   a. Potentially excessive bleeding may occur which requires a post-operative blood transfusion but this is extremely rare.

5. Damage to nerves
   a. There are several nerves that surround the shoulder and as a result there is a risk to these. Damage to the nerves may present with prolonged weakness and altered sensation in the arm. This may be permanent but usually resolves depending on the severity of the damage.
   b. It is important to note that post-operative pain, weakness and altered sensation are perfectly normal and are often the effects of the anaesthetic and therefore should resolve in a few days following surgery.

6. Continued stiff shoulder
   a. This is a risk for those who are a diabetic in particular.
   b. It is crucial that you start immediately with your post-operative exercises to prevent any further stiffening of the joint.

What are the treatment options for frozen shoulder?
There has been much research covering all treatment options for the management of a frozen shoulder over the years. The most popular treatment options include:
- Oral Steroids
- Intra-articular steroid injections
- Physiotherapy
- Manipulation under anaesthetic
- Arthroscopic capsular release

What is an Arthroscopic Capsular Release?
The procedure involves the release of the tight thickened connective tissue in your shoulder. It is done arthroscopically thereby using two very small portholes in the skin. As a result this limits the potential for infection. There are a variety of anaesthetic options available and your anaesthetist will discuss these with you. You may also require a local anaesthetic injection to help with the post-operative pain and you may be given antibiotics during the operation to prevent the risk of infection. The operation is likely to take approximately 30-60 minutes.
What happens following the surgery?
It is likely that you will be required to remain in hospital over-night. Prior to leaving hospital you should see a physiotherapist who can instruct you on the post-operative exercises for you to continue with at home. Unfortunately it is not always possible to see a physiotherapist prior to discharge and therefore a list of appropriate exercises are provided below. These must be carried out on a regular basis to continue with the improvements made from the surgery.

The success of this operation following the surgery depends on the input of the patient! It is imperative that you continue with your exercises regularly at home.

3½-4 weeks
As above and add in the exercise below 9.

- Lie on your side with your upper arm on a towel. Your shoulder and elbow are bent 90 degrees.
- Push your hand towards the floor with your other hand, keeping your elbow still
- Hold for 15secs depending on pain response
- Repeat 10 times, 4 times per day

4 weeks - onward
Individual programmes can be modified and progressed until maximal range of motion has been achieved.

Possible post-operative complications
Following any operative procedure there are potential risks. We aim to reduce these as much as possible through pre-operative screening and assessment and great care taken operatively. Possible complications include:

1. Complications of anaesthesia
   a. Your anaesthetist will be able to advise further

2. Pain
   a. You will experience pain post-operatively which is normal and is related to the healing process. This should not be confused with ongoing damage.

3. Infection
10 days - 2½ weeks
As above and add in exercise below

7. Sit on a chair with your arm supported on a table.
   With your other hand push the top of your upper arm downwards.
   Hold for 10 secs depending on pain response
   Repeat 10 times, 4 times per day

2½-3½ weeks
As above and add in exercise below

8. Stand with arms behind your back and hold one hand.
   Slide your hand up along your back.
   Hold for 15 secs depending on pain response
   Repeat 10 times, 4 times per day

Following discharge from hospital you will receive a physiotherapy outpatient appointment whereby the physiotherapist can ensure you are carrying out the correct exercises and provide additional exercises if necessary. Occasionally it is necessary for the physiotherapist to provide manual therapy to passively stretch the operated tissue however provided that you are strict with your post-operative exercises this should not be necessary.

The following exercises have been adapted from Watson et al (2000)

**Days 0-1 post-op**

1. Stand leaning on a table with one hand.
   a). Let your other arm hang relaxed straight down. Swing your arm forwards and backwards.
   b). Swing your arm to your left and then to your right.
   c). Swing your arm as if drawing a circle on the floor. Change direction.

   Repeat 15 times in each direction 5 times hourly in hospital and 10 times every 2 hours at home

2. Lying on your back with elbows straight.
   Use one arm to lift the other arm up keeping it as close to the ear as possible.

   Hold stretch for 5 secs.

   Repeat 5 times hourly in hospital and 10 times every 2 hours at home
Days 1-4
As above but increase stretch to 10secs plus exercises below

3. Stand and grip one end of the stick with the arm to be exercised.
   Lift the stick up forwards or sideways by assisting with the other arm.
   Hold stretch for 10secs.
   Repeat 10 times, every 2 hours

4. Sit or stand. Place your hands on a table.
   Slide your hands along the table as far as you can without lifting your shoulders.
   Hold stretch for 10secs.
   Repeat 10 times, every 2 hours

Days 4-10
As above but reduce the exercises to 10 times, 4 times per day and add in exercises below:

5. Stand holding a stick behind your back / or your hands on the small of your back.
   Hold stretch for 10secs
   Repeat 10 times, 4 times per day

6. Sit or stand with both elbows at right angles. Place a rolled towel between your elbow and side. Hold a stick with both hands.
   Push the stick to move the arm outwards.
   Hold stretch for 10secs
   Repeat 10 times, 4 times per day