

INFORMATION FOR PATIENTS

Physiotherapy department

Frozen shoulder

The aim of this information booklet is to provide you with an understanding of what frozen shoulder is, what causes it and how it can be treated. In order for you to manage your frozen shoulder and gain the maximum benefit from treatment it is important that you have a good understanding of the condition.

Terminology

There is debate in the literature about the correct term for frozen shoulder and how and why it occurs. Put simply it is a stiff and painful shoulder in which the capsule becomes inflamed and fibrous (thickened), which can be extremely debilitating.

You may hear it called:

- Frozen shoulder (syndrome)
- Adhesive capsulitis
- Capsular contraction of the shoulder
- Contracted shoulder.

Anatomy

The shoulder is designed to provide a large range of movement which allows us to perform our daily tasks.

Your shoulder is made up of three bones - your upper arm bone (humerus), your shoulder blade (scapula), and your collarbone (clavicle), which together form a ball and socket joint. The ball is the upper part of your arm bone (head of the humerus) and the socket (glenoid) is part of your shoulder blade. Surrounding the shoulder (glenohumeral joint) is a capsule which you can imagine to be like a sleeve enveloping the whole joint.

Who gets it?

It is unclear why the shoulder becomes frozen, but there are certain things that increase your risk, or likelihood. It affects between 1-3% of adults in the UK.

It most commonly occurs in people aged between 40 and 60 years.

It is associated more commonly with people with a history of diabetes or Dupuytren's contracture in the hand.

Frozen shoulder can also follow a minor accident or injury, a fracture or an operation.

Often the injury or operation does not have to be directly to the shoulder.

Either shoulder can be affected.

How is it diagnosed?

Your doctor or physiotherapist will be able to decide whether you have this problem by asking you questions and examining your shoulder. You may need other tests e.g. x-ray, but not always as frozen shoulder is considered a clinical diagnosis.

What are the symptoms?

Pain

The distribution and severity of pain differs from patient to patient. The most common distribution is directly around the shoulder joint and upper arm region. Usually there are no nerve symptoms like pins and needles or numbness but some patients occasionally report these.

Stiffness

Typically movements are effected in the following order:

1. Turning your hand out with your elbow tucked in (external rotation).
2. Raising your arm up and out to the side (abduction).
3. Being able to put your hand behind your back towards the middle of your spine (internal rotation).

The condition tends to follow three phases:

Phase 1- the painful or 'freezing' phase

This typically lasts 2-9 months. The first symptom is usually pain, with stiffness and less movement in the shoulder follow as the pain increases. The pain is typically worse at night and when you lie on the affected side

Phase 2 - stiff phase or 'frozen' phase

This typically lasts 4-12 months. Pain gradually eases but stiffness and limitation in movement remains and can worsen. All movements of the shoulder are affected. Often the movement that is most severely affected is external rotation (rotation of the arm outwards). The muscles around the shoulder may reduce in size as the pain and stiffness mean you struggle to use the arm normally.

Phase 3 - recovery phase or 'thawing' phase

This typically lasts between 1 and 3 years. The pain and stiffness gradually ease and movement gradually returns to normal, or near normal.

Frozen shoulder is considered a 'self-limiting' condition, which means the symptoms should eventually improve naturally over time. About 4 out of 5 people will have a complete recovery, but some pain and stiffness may remain. Approximately 20% of patients with a frozen shoulder may develop a similar problem in the opposite arm.

What activities may aggravate your pain?

Typically, as the condition affects the whole joint, you are likely to experience a large restriction in movement. This can stop you from doing every day activities such as getting dressed, washing, and combing your hair. It can also disrupt your sleep, especially when lying on the affected side. Your shoulder is likely to be more painful if you move it too quickly or it is jarred.

What things may alleviate your pain?

Avoiding aggravating movements is a good way to avoid increasing your pain. Try not to sleep on your affected arm at night - advice on how to manage this is detailed later in this booklet. Physiotherapy and medical management is also detailed later in this booklet.

To help ease your discomfort at home you can apply a cold pack to the shoulder, for example a bag of frozen peas wrapped in a wet towel.



You may need to do this regularly.

Alternatively you can try a heat pack placed over your lower neck and shoulder to relieve tension and improve blood flow to the area - this can be quite soothing.

With both of these techniques do not apply the heat or cold directly to the skin and make sure to regularly check the area (every 5 minutes) to ensure there is no burning of the skin or other complications. If either aggravate the area, discontinue the treatment and discuss with your physiotherapist on your next visit.

How can I sleep?

Sleeping on your painful shoulder may be uncomfortable. We recommend sleeping on your back, or opposite side, with pillows supporting the forearm in a neutral position. Feather pillows are easier to use than foam ones.

One pillow slightly folded under your neck gives enough support for most people.

A pillow folded in half supports your arm in front.



A pillow tucked along your back helps to prevent you rolling onto your operated arm in the night. **Many patients find placing the pillow under the sheet prevents it falling out of bed in the night.**

If sleeping on your back use a folded pillow (as shown) under the arm and elbow.

Physiotherapy

Your physiotherapist will be able to provide you with a rehabilitation program to help restore range of movement, strength and stability to your shoulder and help you manage your pain. Movement will be the key to your recovery.

Your treatment will usually consist of a combination of advice, education, manual therapy and exercises. This booklet will detail some of the simple exercises you can start to do if your shoulder isn't too painful.

Exercises

It can be a good idea to keep a diary of your exercises (and aggravating or easing factors) and your symptoms to show your physiotherapist or healthcare professional. For example:

Date and time	Exercise/ other (e.g. heat or even rest)	Sets and repetitions or time	Comments
08/01/15 9am	1,2,3	2 sets 5 reps	Felt a little sore on the top of my shoulder after exercise two.
10/01/15 9am	1,2,3,4	2 sets 7 reps	Felt a little easier today. Only managed 3 reps of exercise 4.
10pm	Heat pack and changed sleeping position	15mins	Seemed to sleep better– will try this again tomorrow.

Definitions:

Set = the number of times you complete a number of repetitions.

Repetitions (reps) - the number of times you complete a whole movement/exercise.

Try to do five repetitions of each exercise and build up as pain allows.

They can then be altered or increased under the guidance of your physiotherapist.

Technique is also very important; please check with your physiotherapist if you are unsure about any exercises.

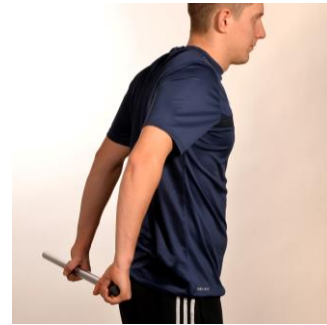
1) Leaning forwards from your hips, circle your arms from your shoulder in gentle, pendulum type movements. Keep your palms facing forwards as you go clockwise and anticlockwise.



2) Shrug your shoulders up and backwards in a smooth, circular motion.

3) Stand tall grasping a stick with both hands behind your back. Roll your shoulders back and down.

Now use the stick to help take your operated arm up and out behind you.



4) In this position, pull your operated arm up behind your back. You may use a stick or a towel if you can't reach it with your hand.

5) Lie on your back with your elbows on folded towels so that they are level with your shoulders.

Bend your elbows to at least 90 degrees, and use a stick to turn your operated arm out to the side. Keep your elbows tucked in.





6) From lying on your back with your elbows supported as before, use your unoperated arm to lift the other up towards your head. Try to get your hand under your head if you can.



Now, resting your hand under your head, try to lower your elbows out to the side. Reverse the movement to bring the elbow up.

7) Stand facing a kitchen worktop, windowsill or other stable surface. Lean forward and rest your elbows upon the surface - you may use a pad for comfort.

Try and hold your hands together as you slowly walk backwards, leaning on your elbows until the shoulder is stretched. Walk forwards again to ease off.



Alternative approaches such as acupuncture or TENS (nerve stimulation) machines may be helpful. It may also be important to investigate other areas such as posture and strength in your whole upper body. For many people, maintaining an active and healthy lifestyle can improve wellbeing and recent studies have suggested physical activity (e.g. brisk walking) can potentially shorten the course of the condition, especially if you are diabetic.

Please bear in mind your physiotherapist may only be able to see you for a relatively short period of time, so it will be up to you to follow the advice and exercise program as prescribed at home. If you need further advice please do not hesitate to contact the department. Your physiotherapist or doctor may advise on a steroid injection to help to relieve some of the inflammation and pain in your shoulder. This may not be suitable for some people and should therefore be discussed with your physiotherapist or doctor.

What other interventions might help?

Your doctor may prescribe anti-inflammatory drugs and or painkillers to help settle any inflammation and reduce the pain. You may be prescribed stronger pain control at night or sleeping tablets to improve your symptoms and sleep.

These must be taken as directed by your doctor or pharmacist, it is important you follow their instruction. If you experience side effects please discuss them with the doctor or pharmacist.

By taking regular pain control you will not mask your pain in a way that is harmful, it will allow you to do more on a daily basis including your exercises which will improve the management of your condition. You may also need a doctor to advise on your ability to work as you may need amended duties or time off.

Surgical intervention

If conservative treatment has not been successful then surgery may be the next step. Your eligibility for surgery will need to be discussed with a GP or surgeon. The options can include:

- Arthroscopic capsular release - using keyhole surgery small cuts are made in the capsule to reduce the tightness.
- Manipulation under anaesthesia (MUA) - this is a non-invasive technique so no cuts in the skin will be made. The arm is moved forcefully but carefully while you are under the effects of a general anaesthetic (put to sleep) with the aim of stretching and releasing the capsule.

List of references:

- Hanchard N et al. Evidence based clinical guidelines for the diagnosis, assessment and physiotherapy management of contracted (frozen) shoulder. London: Chartered Society of Physiotherapy, 2011
- Rangan et al. BESS/BOA Patient Care Pathways: frozen shoulder. *Shoulder & Elbow* 2015; 7(4):299-30

Further sources of information

NHS Choices: www.nhs.uk/conditions

Our website: www.sfh-tr.nhs.uk

Patient Experience Team (PET)

PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service:

King's Mill Hospital: 01623 672222

Newark Hospital: 01636 685692

Email: sfh-tr.PET@nhs.net

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email sfh-tr.PET@nhs.net.

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