



## **Frozen Shoulder... The latest research.**

In 2011 a large study was released (endorsed by the Chartered Society of Physiotherapy) discussing a very common condition known as “Frozen Shoulder”. (Hanchard et al 2011) We have summarised this information alongside other relevant sources to produce an information sheet we hope you find interesting and informative.

### **What is a Frozen Shoulder?**

The term “Frozen Shoulder” is used to describe a combination of shoulder pain and stiffness that causes sleep disturbance, marked disability and can be a problem for some years. Sometimes it comes on after an injury or operation, and other occasions will just gradually occur in certain population groups we will identify later. Usually your symptoms will resolve within 2 years however it is still possible to be experiencing symptoms 4 years after the initial onset. Unfortunately in some cases it doesn’t ever fully resolve. (Bunker 2009)

“Frozen Shoulder” (also called “Adhesive Capsulitis”) can be a very painful and disabling shoulder problem. Shoulder pain is the third most common musculoskeletal reason that people seek medical advice from their GP’s, with an estimated 50-80% of people with shoulder pain not seeking any medical attention at all. It is therefore a very common problem and one that many people seek Physiotherapy intervention for. So what can be done?

### **Diagnosing a Frozen Shoulder**

The first priority at a Physiotherapy assessment at Advance Physiotherapy will be to establish what the cause of a patient’s shoulder pain is. This brief article is purely on Frozen Shoulder, but there are many causes of Shoulder pain from a variety of problems including a person’s neck, and it is important to make the correct diagnosis so the correct treatment can be applied.

Often the diagnosis of “Frozen Shoulder” is quite clear from the history, but tests often have to be used to exclude other possible causes. There is usually a gradual onset of arm pain and the patient is unable to lie on the affected side when sleeping. The condition goes through a process in which inflammation leads to scarring. The condition also runs a distinct course divided into 2 main phases:- “pain pre-dominant” and “stiffness predominant”. This is slightly different to older classifications of frozen shoulder which used 3 phases.

1. “Freezing” (The painful phase)
2. The Frozen (The Stiffness phase)
3. “The Thawing” phase which indicates a gradual reduction in symptoms and hopefully a return to function. Each phase can last several months if left to run its course, and effectively the “frozen” and “thawing” stages fall under the “stiffness” phase detailed in the 2011 report.

Essentially there is a phase of increasing pain and stiffness to the point where patients can even have pain at rest which can include pain extending below the elbow. Following this stage the pain generally settles and the stiffness takes over as the main complaint. X- rays are unable to show this condition as they only show bones and their shapes, and there are no known bony changes associated with frozen shoulders.

The stiffness of frozen shoulders tends to outlast the pain. This is thought to be due to changes seen in blood circulation and also because painful frozen shoulders may respond well to corticosteroid injections. The injections are a very powerful suppressor of inflammation.

Examination often reveals a global reduction in movement but the principle test is to measure the range of passive external rotation (i.e. the movement is performed by the tester). If you bend your elbow to 90 degrees with your arm against your side, and move the hand away whilst the elbow stays in contact – this is external shoulder rotation.

### **Commonly Affected Groups.**

There are certain population groups in which Frozen shoulder is more common and those include.

- Patients with diabetes
- Patients with (or with a history of) Dupuytren's disease.
- Women (Ratio of 1.3:1 – Brukner and Khan 2009)
- Predominantly in the 40-60 age group
- The left Shoulder is more commonly affected. (Ratio of 1.3:1 – Brukner and Khan 2009)

However Hanchard et al (2011) believed that identifying specific groups may be more difficult than previously imagined due to possible bias being present in the samples being surveyed by researchers.

### **Treatment**

Physiotherapists at Advance Physiotherapy will firstly ensure the correct diagnosis of Frozen Shoulder and advise/discuss with our patient how this condition is likely to affect them, suggesting where possible strategies to minimise the effects of the condition on their life. They will normally prescribe exercises in the management of frozen shoulders alongside their treatments.

In the pain phase of frozen shoulders gentle exercises are used, which may possibly help reduce pain and maintain the health of the tissues within and around the joint. In the stiffness phase of the condition, function based exercises are used to help restore the range movement. "Hands On" Manual Therapy is also used by physiotherapists, which may help control the pain but also restore the movement of the shoulder especially in the stiffness pre-dominant phase.

Hanchard et al (2011) suggest that to get the best results from physiotherapy and to help control the pain, having a steroid injection into the shoulder joint as soon as symptoms start can help the recovery from the condition and is recommended by shoulder specialists. Other modalities such as electrotherapy and acupuncture can also be used to help control the pain, although the use of these is variable amongst practitioners.

## **More Information**

For more information or to book an appointment please call Advance Physiotherapy Nottingham on 0115 9455232 or visit our website [www.advance-physiotherapy.com](http://www.advance-physiotherapy.com).

## **Key References**

Hanchard N, Goodchild L, Thompson J, O'Brien T, Richardson C, Davison D, Watson H, Wragg M, Mtopo S, Scott M. (2011) Evidence-based clinical guidelines for the diagnosis, assessment and physiotherapy management of contracted (frozen) shoulder v.1.2, 'standard' physiotherapy. Endorsed by the Chartered Society of Physiotherapy. Available at: [www.csp.org.uk/skip](http://www.csp.org.uk/skip)

Brukner p. Khan K (2009) Clinical Sports Medicine Revised Third Edition. McGraw-Hill Medical.

Article written by the following Physiotherapists at Advance Physiotherapy, Nottingham.

Michael Brownlow. MSc BSc (Hons) MCSP HPC  
Carly Haynes. BSc (Hons) MCSP HPC.

Information correct on 14<sup>th</sup> February 2011.