

The depressors of the shoulder are strengthened by squeezing the elbow in to the side over a pillow or against a resistance band available from the physiotherapist. The contraction should be held for 10 seconds and then the shoulder relaxed for 10 seconds. The exercise should be repeated perhaps 10-50 times.

The internal rotators of the shoulder are strengthened by holding the elbow in to the side whilst twisting the hand in across the stomach against the resistance of a pillow, door post or resistance band. The external rotators are strengthened by holding the elbow in the waist whilst twisting the hand out to the side. These exercises should be repeated in the same way. Exercise should be undertaken for perhaps 30 minutes 3 times each day. After perhaps 2-6 weeks when any pain has settled, the resistance can be increased and weight training started. Initially for the first 2-4 weeks of weight training, only very light weights should be used.

Medication:

Anti-inflammatory tablets are commonly used in the treatment of tendonitis and joint inflammation (Ibuprofen, diclofenac, viox etc). These tablets reduce inflammation as well as acting as pain killers. The tablets may cause a stomach upset and should therefore be taken with food. If, despite this, the stomach pain continues, then the dose should be reduced or even stopped if necessary.

Steroid Injection:

Injection of steroid and local anaesthetic into the inflamed tendon or into the shoulder joint can help the inflammatory process to settle down. The steroid is only active in the local area of the injection and has no effect on the surrounding bones or the general metabolism. The injection may be painful for several minutes, but an improvement in the pain is then noticed. The improvement may last for several weeks or months or indeed be permanent. If the symptoms return, one or two further injections may be helpful, more than this rarely has any advantage and may damage the joint. If two or three injections have been undertaken without any lasting effect then alternative treatment and possibly surgery should be considered.

SURGICAL TECHNIQUE

Manipulation Under Anaesthetic:

This is commonly used in the treatment of a frozen shoulder. If the stiffness in a shoulder does not respond to intensive physiotherapy and injection of steroid, a manipulation under anaesthetic is usually suggested. Whilst under a general anaesthetic the shoulder is moved through a completed range of motion. This has the effect of breaking down any adhesions within the joint and stretching the ligaments around the shoulder. Subsequent physiotherapy is undertaken during the early days and weeks so as to maintain the range of motion achieved.

The Reason For An Arthroscopy:

Arthroscopy is the technique of performing surgery inside the shoulder joint through a telescope without disrupting the surrounding structures. Looking inside the joint with the arthroscope allows the Surgeon to look directly at the tendons, rotator cuff, shoulder labrum, ligaments and the articular surfaces. In some cases it is difficult to be certain of the diagnosis of a labral or rotator cuff tear or the amount of shoulder instability without a close internal inspection. In addition surgery can be undertaken through the arthroscope to remove the labral tear, remove the inflammation around the tendon, to partially remove the overhanging acromium bone, or to remove a loose body from inside the joint. Shoulder arthroscopy is commonly performed as a day case procedure with a rapid recovery and a rapid return of function often within a few days.

Arthroscopy also has the ability to inspect the internal state of the shoulder joint. This is used particularly to inspect the articular surfaces to determine if there are any defects or arthritic changes, the labrum or meniscus of the shoulder to determine any tears or deficiencies, the biceps tendon which may be torn or affected by tendonitis. To the superior aspect of the shoulder joint itself is the rotator cuff tendon originating from the supra spinatus muscle. The under-surface of this can be inspected from inside the shoulder joint itself to determine if there is any tendonitis, partial or complete tearing of the tendon. Subsequently at arthroscopy the space above the rotator cuff tendon and below the bone

of the acromium at the top of the shoulder can be inspected. This space contains the sub scapula bursa. Once again this space is inspected at arthroscopy for tears of the rotator cuff or tendonitis. A spur of bone may be seen on the under-surface of the acromial bone. This is commonly present as an over-use or degenerative feature and can be the cause of tendonitis. In addition the distal end of the clavicle can be inspected where it articulates with the acromium and the shoulder. This joint is often affected by arthritic or degenerative changes.

Arthroscopic surgery:

Sub Acromial Decompression:

Where there is a bone spur on the under-side of the acromium at the top of the shoulder this is commonly associated with rotator cuff tendonitis due to impingement. At arthroscopy of the sub acromial space this spur can be excised with a portion of the acromium itself. This technique is called arthroscopic acromionectomy or sub acromial decompression. Part of this if the acromio-clavicular joint between the acromium itself and the lateral end of the clavicle is arthritic or degenerative then the bony spurs around this joint can be excised. In particularly severe cases the joint itself is sometimes excised.

Rotator Cuff Repair:

In cases where the rotator cuff is intact but affected by tendonitis then simple sub acromial decompression and removal of the spur is often sufficient to alleviate patients' symptoms. Where there is a partial thickness tear on the superior or inferior surface then this may be debrided and smoothed over. In more severe cases where there is a tear then this is often repaired. The techniques for repair include some arthroscopic techniques or many open techniques. The nature of the surgery depends upon the extent and nature of the tear. Occasionally in severe degenerative cases where a massive tear is present often in an elderly population then formal repair of the defect is not made as in these cases and often symptomatic relief can be provided by sub acromial decompression without the necessity for repair. Following repair support of the arm in order to protect the repaired rotator cuff tendon is often necessary for a number of weeks. This is often achieved by using an abduction type pillow.

Shoulder Stabilisation:

At arthroscopy the stability of the shoulder can be carefully tested under direct vision. Deficiencies of the articular surfaces, labrum of the shoulder itself or laxity of the surrounding ligaments can be assessed. Arthroscopic techniques are available in some cases to undertake repair. These include repair of the labrum itself, shoulder labrum, tightening and repair of the ligaments around the shoulder. These techniques are often used in cases where the history of shoulder instability or dislocation is moderate and there are no other factors which might suggest an open surgical technique would be more suitable.

RETURN TO WORK AND SPORT

Arthroscopic shoulder surgery is one of the most common, most successful and safest orthopaedic surgical procedures undertaken. Arthroscopic sub acromial decompression is very successful in relieving the pain of rotator cuff tendonitis and allowing a return to daily activities and sports. The recovery is usually rapid within 6-12 weeks. The incidence of any post-operative complication is low and usually less than in 1% of cases.

Arthroscopic surgery usually requires you to be in hospital for only 8-10 hours, unless the shoulder is opened in order to repair a torn tendon. In these cases an overnight stay is usually advised. Arthroscopic surgery, compared to open surgery, causes very little disturbance to the shoulder joint and consequently the post-operative discomfort is much less. While the degree of discomfort felt is variable, in general only slight pain will be experienced for a few days. This will not prevent you driving after a few days. If you notice any numbness or pain in the hand or forearm following arthroscopy please inform the nurse on duty. Exercise with a physiotherapist is usually commenced immediately following arthroscopy and continued several times a week for between 2 and 6 weeks.

If your job is sedentary and mostly sitting you may wish to return after only a few days. If your job is physically demanding and requires lifting, your return to work may take up to 6 weeks. Driving can usually be performed after 2 to 5 days providing that the shoulder is pain free and you are able to

control the car. Light weight training may be undertaken after several weeks. Lifting weights above the head or racket sports may take a little longer. Exercises and gym training will speed up the rehabilitation and should be performed prior to undertaking more vigorous sports.

The first follow up appointment following surgery is usually arranged for 2-3 weeks after surgery. Physiotherapy should be started soon after surgery, usually 3-5 days later and continued 2-3 times a week for 2-6 weeks depending on the individual patient's progress.

Please visit www.orthopaedics.co.uk for more information.

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