Disclaimer

This movie is an educational resource only and should not be used to make a decision on Shoulder surgery. All decisions about surgery must be made in conjunction with your surgeon or a licensed healthcare provider.
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INTRODUCTION

The information in this presentation has been intended to help consumers understand the structure and function of anatomical components and take charge of Orthopaedic health. The animated surgeries and procedures should help you understand arthroscopic procedures and help you to make a decision.

Also, it explains the risks, complications and provides guidelines for living with surgeries, conditions and procedures.
The Shoulder Joint

Shoulder is a "ball-and-socket" joint. A "ball" at the top of the upper arm bone (the humerus) fits neatly into a "socket," called the glenoid, which is part of the shoulder blade (scapula).

The cartilage cushions the joint, and allows the bones to move on each other with smooth movements. This cartilage does not show up on X-ray, therefore you can see a "joint space" between the head of the upper arm bone (Humerus) and Glenoid socket of the shoulder blade (Scapula).

Anatomy

Shoulder is a 'ball-and-socket' joint. A 'ball' at the top of the upper arm bone (the humerus) fits neatly into a 'socket', called the glenoid, which is part of the shoulder blade (scapula).

Three bones, the collarbone (clavicle), the shoulder blade (scapula), and the upper arm bone (humerus) come together to form the shoulder joint.

(Refer fig. 1)

Humerus

Provides attachment to muscles of the upper arm. The humoral head forms the ball of the ball-and-socket shoulder joint.

(Refer fig. 2)

Scapula

Scapula (shoulder blade) is a flat, triangular bone providing attachment to the muscles of back and neck.

(Refer fig. 3)
Clavicle

The clavicle is an S-shaped bone that connects the shoulder girdle to the trunk. It maintains the shoulder in a functional position with the axial skeleton and allows varied arm positions in sports.

In addition to its structural function, the clavicle protects major underlying nerves and blood vessels as they pass from the neck to the axilla.

(Refer fig. 4)

Coracoid process

The coracoid process is the extension of the Scapula (Shoulder Blade) around the shoulder joint at the front.

(Refer fig. 5)

Acromion

The acromion is the extension of scapula (shoulder blade) around the shoulder joint at the rear to form a roof.

This is also called the acromial process.

(Refer fig. 6)
Glenoid

Glenoid is the depression at the end of scapula that forms the socket of ball-and-socket shoulder joint.

(Refer fig. 7)
Introduction - Frozen Shoulder

Frozen shoulder, also called adhesive capsulitis is a condition characterized by pain and loss of motion in shoulder joint.

- It is more common in women than men.
- More commonly affects left shoulder than right.

Difference between the normal and frozen shoulder

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(Fig. 8)

Causes

Often the exact cause of Frozen shoulder is not known. It is most commonly associated with diabetes and a few other endocrine diseases.

FROZEN SHOULDER IS NOT ASSOCIATED WITH ARTHRITIS OR CANCER.

Symptoms

Frozen shoulder symptoms are variable and may start with:

- Severe pain in the affected shoulder and
- Gradual loss of movement

Many times patients will describe their shoulder as becoming increasingly stiff and painful over a period of time.
Typically the course of frozen shoulder occurs in three different phases that last about a year. Rarely it can last up to 3 years.

Stage one:
"Freezing" stage: In this stage the patient develops a slow onset of pain. As the pain worsens, the shoulder loses motion.

Stage two:
The "frozen" stage is marked by a slow improvement in pain, but the stiffness remains.

Stage three:
The final stage is the "thawing", during which shoulder motion slowly returns to normal.

Treatment Options
Frozen shoulder is a self limiting disease and symptoms usually subside after a year. Treatment is aimed at pain control and restoration of motion.

Conservative (Non Operative)
- Pain medication
- Physical Therapy to restore movement. You will be shown different exercises to improve your range of motion.
- Sometimes heat may be applied to reduce pain

Non Conservative (Operative)
This is when the conservative treatment does not work or works temporarily. Then your surgeon may ask you to undergo Surgical Intervention.

Surgery is performed under local anaesthesia or general anaesthesia and involves cutting the tight ligaments & capsule. It also involves removal of the scar tissues from the affected shoulder. It can be performed with an arthroscope or with an open technique (larger incision). The primary advantage of arthroscopic technique is a shorter recovery time.

(Refer fig. 9)
**Procedure**

Surgery for frozen shoulder involves cutting the tight ligaments & capsule and remove the scar tissue from the affected shoulder.

*(Refer fig. 10)*

In an arthroscopic procedure, two or three small incisions are made. Each incision is called a portal.

In one portal, the arthroscope is inserted to view the shoulder joint. Along with the arthroscope, a sterile solution is pumped to the joint which expands the shoulder joint, giving the surgeon a clear view and room to work.

*(Refer fig. 11)*

With the images from the arthroscope as a guide, the surgeon can look for any pathology or anomaly.

*(Refer fig. 12)*

The large image on the television screen allows the surgeon to see the joint directly and to determine the extent of the injuries, and then perform the particular surgical procedure, if necessary.

*(Refer fig. 13)*

Special instruments are inserted in the second portal to cut the inflamed ligaments. The tight capsule is also released.
After treating the problem, the incisions (portals) are closed by suturing or by a Tape and you are then taken to the recovery room.

(Refer fig.14)

Post-op Recovery

- You will be taken to the recovery room before being transferred to the ward.
- A bandage will be around the operated shoulder.
- Once you are recovered your drip will be removed and you will be shown a number of exercises to do.
- Your surgeon will see you prior to discharge and explain the findings of the operation and what was done during surgery.
- Pain medication will be provided and should be taken as directed.
- You can remove the bandage in 24 hrs and place dressings provided by your surgeon over the wounds.
- It is NORMAL for the shoulder to swell after the surgery. Placing Ice-Packs on the shoulder will help to reduce swelling. (Ice packs on for 20 min 3-4 times a day until swelling has reduced)
- You are able to drive and return to work when comfortable unless otherwise instructed.
- Please make an appointment 7-10 days after surgery to monitor your progress.

Rehabilitation

After surgery, there will be some pain in the arm for about a week and your arm may be placed in a sling for a short period of time. This allows for early healing.

A few surgeons will advise you to start using your arm straight away. The surgeon will provide a rehabilitation program based on your needs and the findings at surgery. This will include exercises to regain range of motion of the shoulder and strength of the arm.

Risks & Complications

Although uncommon, complications do occur occasionally during or following arthroscopy. Anaesthetic complications are uncommon and may include allergic reactions to medications and difficulty in breathing.

Local complications may include infection, phlebitis (blood clots of a vein), excessive swelling or bleeding, damage to blood vessels or nerves, and instrument breakage are the most common complications, but occur in far less than 1 percent of all arthroscopic procedures.
Summary

Although every effort has been made to explain the complications there will be complications that may not have been specifically mentioned. A good knowledge of this operation will make the stress of undertaking the operation easier for you to bear.

The decision to proceed with the surgery is made because the advantages of surgery outweigh the potential disadvantages. It is important that you are informed of these risks before the surgery.
YOUR SURGERY DATE

READ YOUR BOOK AND MATERIAL

VIEW YOUR VIDEO /CD / DVD / WEBSITE

PRE - HABILITATION

ARRANGE FOR BLOOD

MEDICAL CHECK UP

ADVANCE MEDICAL DIRECTIVE

PRE - ADMISSION TESTING

FAMILY SUPPORT REVIEW

Physician's Name:  ____________  Patient's Name:  ____________
Physician's Signature:  ____________  Patient's Signature:  ____________
Date:  ____________  Date:  ____________