

# Shoulder Protocol Bankart Information

#### How the Shoulder Works

The shoulder is a ball and socket joint. It is made up of three bones: the upper arm bone (humerus) shoulder blade (scapula) and collarbone (clavicle). The ball at the tope end of the humerus fits into the small socket (glenoid) of the shoulder blade to the shoulder joint or glenohumeral joint. The socket of the glenoid is surrounded by a soft tissue rim (labrum) that allows the ball to remain located in the socket. The labrum makes the socket deeper and acts like a chock block under a tire to keep the ball from coming out of the socket. A smooth, white durable joint surface called articular cartilage on the head of the humerus and the socket provide shock absorption and all the smooth motion of the shoulder joint. A thin inner lining of the joint (synovium) makes a small amount of fluid for lubrication of the shoulder joint.

# Function of the Labrum and Natural History of Bankart Lesion

The two basic forms of shoulder instability are subluxations and dislocations. A subluxation is a partial or incomplete dislocation. Subluxations can lead to dislocation of the shoulder with relatively minor injury. A dislocation is when the head of the humerus slips completely out of the socket. Sometimes the ball goes back into the socket on its own, but often someone else has to pull the ball back into the socket.

Most shoulder instability occurs with the arm at or above the shoulder level resulting in the ball dislocating out the front of the socket. This type of dislocation most often results in a tear of the labrum off the bottom-front quadrant of the socket. This type of labral tear will typically heal, but if it heals in the wrong position it can no longer deepen the socket and acts as a wedge type block to prevent future instability. The technical term for this type of labrum tear is Bankart lesion.

Other injuries can also occur with dislocation including stretching of the ligaments in the front of the shoulder, a dent in the back of the ball (Hill-Sachs lesion) or injury to other shoulder structures. These can, in most cases, be fixed arthroscopically.

# Surgical Procedure Overview

# **Technical Aspects**

Exam under anesthesia is a physical exam done under anesthesia when the body is relaxed which confirms the diagnosis and tests range of motion of the shoulder as well.

Diagnostic arthroscopy is performed first to thoroughly examine the inside of the joint. The arthroscopy is performed through 3 to 4 small incisions which will allow inflation of the shoulder with fluid and allow passage of a small camera and other instruments.



Frayed rotator cuff tissue is removed with motorized shavers. The socket is then prepared for healing and the unstable portions of labrum are repaired back down to the socket with suture anchors. These absorbable devices are implanted in drill holes and allow for sewing of the labrum back down to the bony socket. This procedure is called a Bankart repair. Occasionally small cysts form under labral tears and in most cases can be decompressed arthroscopically.

Most ligament injury and Hill-Sachs lesions can also be repaired arthroscopically. The ligaments can be tightened arthroscopically with sutures, small bone chips can also be repaired arthroscopically along with the labrum and most Hill-Sachs lesions are small and need no additional treatment. Larger Hill-Sachs lesions can be filled in arthroscopically, but significant lesions may require open bone grafting to restore the socket.

# Anesthesia

Bankart repair with shoulder arthroscopy is done using both a general and regional anesthetic which means you will be "asleep" during the procedure. The regional nerve block is done prior to surgery and will help minimize the amount of anesthetic agents used during surgery decreasing possible side effects. General anesthesia is well tolerated by most people. Please let us know if you have had any problems with previous anesthetics or have a family history of anesthetic issues.

# **Regional Nerve Blocks**

Numbing the nerves to your entire arm is very helpful for early control of post-operative pain. The nerve block is performed by the anesthesia physicians prior to surgery and patients typically require less general anesthetic during the procedure and have the opportunity to get much of the anesthesia out of their system prior to requiring significant pain medication lowering the risk of potential side effects. The block typically last 12 to 24 hours and begins to wear off first in the finger tips.

#### Risks

All surgery has risks. There is likely nothing that you could imagine could go wrong that has not gone wrong at some time. That being said arthroscopic shoulder surgery is a safe procedure with low complication rate. The most common complications involve skin nerves around incisions, the vast majority of which resolve without additional procedures by three months post surgery. Injury to larger nerves and blood vessels and blood clots are also rare risks. Shoulder stiffness is slightly more common making early mobilization of the shoulder an important goal. Infections occur in less than one percent. Other problems like continued pain is uncommon but can occur.

# Effectiveness

In the hands of an experienced surgeon, arthroscopic labrum repair is successful in returning patients to their desired level of activity in 90% of patients. The shoulder can be re-injured, resulting in recurrent instability in approximately 5% of cases.



#### The Team

One advantage of choosing to be treated at an academic medical center is the experience of the attending surgeon. Since 1996 Dr. Green has concentrated his orthopaedic surgery practice in the area of sports medicine, taking care of athletes from professional, elite amateurs to weekend warriors. Focusing on sports medicine has allowed a robust shoulder surgery experience. Instead of performing a half dozen shoulder arthroscopies per year as a general orthopaedic surgery, Dr. Green performs nearly 100 arthroscopic shoulder repairs each year.

Both physicians assistants and orthopaedic surgery residents assist Dr. Green in surgery. Our residents are in their 3<sup>rd</sup> year of a 5 year orthopaedics program while on the sports medicine service. A benefit of having surgery in a teaching hospital is the availability of a doctor on call 24 hours a day 7 days a week. Residents work closely with the attending physician to provide comprehensive care.

# Post Operative

#### **Hospital Stay**

Arthroscopic labrum repair is an outpatient surgery performed at \_\_\_\_\_\_\_. The total estimated time, from check in to check out is between 4 and 6 hours. Typically patients arrive one and a half hours before surgery. You will be notified of your surgery time by phone the day before your surgery. Please keep in mind that these surgery times are estimated and that your actual surgery time may differ. The procedure is generally 90 minutes to 2 hours in duration. Patients will spend at least 45 minutes in the recovery room and will be discharged when pain control is adequate and you are able to tolerate something to eat and drink.

# Assistance at home

You will need someone to stay with you the first night after surgery. Extra help is always appreciated for several days after that.

# **Pain medications**

Patients receive a variety of medications to make the post operative period as comfortable as possible. OxyContin (Oxycodone SR) is a long acting pain medication which will be taken twice daily. Oxycodone is a short acting narcotic taken for break through painful symptoms. Patients typically require pain medication for the first few days and most able to wean completely off by one week.

# Time off work

Depending on your job function, you may be able to return to work about one week after surgery. You will of course need to be off your pain medication before returning to work. This should be worked out with your employer prior to surgery. Please bring any forms that require physician statements or signature to your appointment prior to surgery or you can mail or fax your request to our office. Please allow one week turn around time.



#### Activity level

You will be placed in a sling to be worn at all times for 4 weeks following your surgery. You will not start any rehabilitation with the exception of simple motion until after the sling comes off at 4 weeks. Rehabilitation consists of both visits with the physical therapist and home program. Physical therapy consists of 6 to 8 visits over 12 weeks but total rehabilitation can take up to 9 months. Patients have limitations regarding lifting for approximately 4 months. Contact activities will also be restricted until 4 months after surgery.

#### Follow up visits

Post operative visits will occur at 2,6, and 12 weeks following surgery then again at 6 months.

#### Scheduling your surgery

There is no convenient time for surgery, but since this is an elective procedure, it can be scheduled at a time that is least inconvenient. Please call 450-9300 to schedule your surgery.