# Capsular Shift - Shoulder

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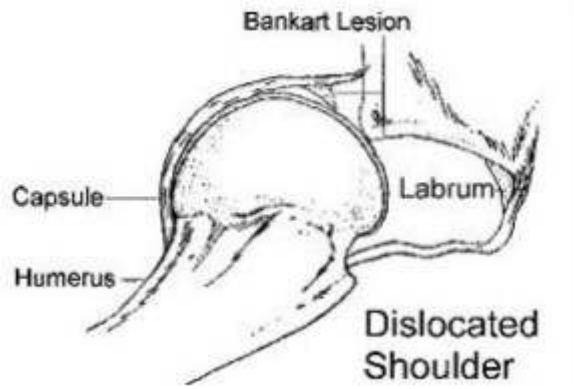
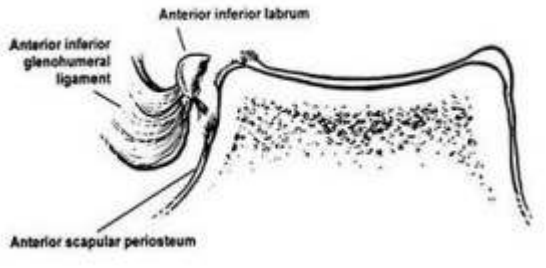
## Repairing Damage from Shoulder Joint Dislocation

The shoulder is the junction of three bones: the upper arm bone (humerus), the collarbone (clavicle), and the shoulder blade (scapula). The shoulder joint is the result of the head of the humerus bone fitting in the cavity (glenoid cavity) of the shoulder blade. Like a golf ball sitting on a tee, it doesn't take a lot to dislodge or dislocate the humeral head (Ball) from the glenoid (Tee).

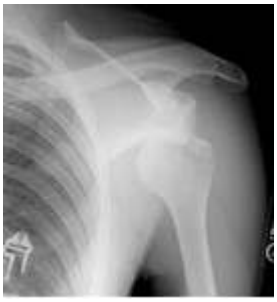



The fragility of the shoulder is reinforced by a series of ligaments, and a rim of tissue that surrounds the cavity called the glenoid labrum. If excessive force is applied to the arm, the shoulder may become "dislocated," that is, the head of the humerus may be forced out of the cavity and the supporting ligaments of the shoulder may be torn, displaced or stretched out of shape.

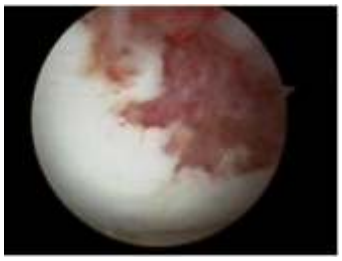



When the shoulder dislocates, the smooth cartilage surface of the humerus ("ball") slides over the rim of the glenoid portion of the scapula (the lip of the cup or golf tee). At the time of shoulder dislocation, or more often at the time of relocation, this can cause a complication and damage to the head of the humerus (the "ball" portion of the joint.) This occurs when the humeral head passes into, or out of, the socket as the ball is impinged against the sharp glenoid rim. The back of the ball can be fractured or dented just like a dent in your car

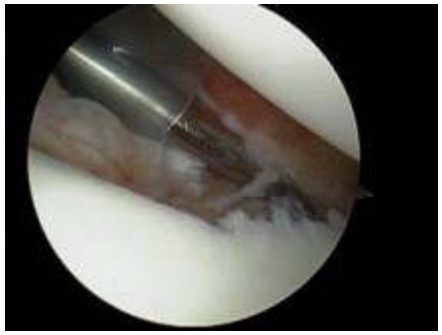
after a fender bender. The dent from this injury is referred to as a “Hill Sachs Lesion.” An x-ray of a dislocated shoulder is shown below in figure 1a.



An arthroscopic photo of the damage to the ball is shown below. The larger this dent is, the easier the shoulder will dislocate again. At the same time the ligaments in the front of the shoulder are avulsed or torn off the rim of the Glenoid (as shown in the drawing above). It is the combination of the dent size and ligament damage that is the true measure of future instability of the shoulder.

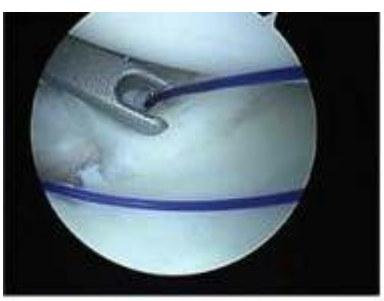


A Bankart procedure, Labral repair or Gleno-humeral ligament repair, are surgical techniques for the repair of the damage from a single or recurrent shoulder joint dislocations. In this procedure, the torn labrum (or lip of the socket) with the attached ligaments are reattached to the proper place in the shoulder joint. By re-attaching these ligaments and cartilage we can prevent future dislocations. With the proper tightening of the lining, the Hill Sachs Lesion (the dent) will not hit the rim with routine motion. The shoulder is made stable and the re-injury risk is greatly reduced by avoiding “dent/ rim” contact. Dr. Reznik does this repair through the arthroscope with sutures and tiny absorbable anchors. The goal is to restore normal function in a minimally invasive way as an outpatient procedure. If the ligaments alone are torn or stretched and the labrum is still attached, they can be repaired in a similar manor.



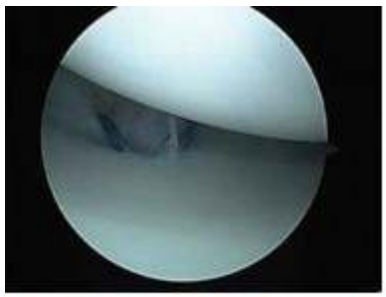
Frequently the ligaments and the capsule lining are stretched out of shape. This may also cause instability, subluxation or recurrent dislocations. Many of these patients cannot work overhead or throw any object. They also have difficulty with overhead sports. When this occurs, the loose capsule can be tightened at the same time the ligaments are repaired. This is referred to a “Capsular Shift” procedure.

Dr. Reznik also performs this surgery with a minimally invasive technique through an arthroscope (fiber optic scope) with little disruption to the other shoulder structures. The surgery is done on an outpatient basis which allows patients to be home in a few hours instead of days. On rare occasions the dent is so large that is needs to be grafted. Arthroscopic assisted methods are available for this procedure as well.



Lead Suture being passed through a torn ligament/Labrum

Permanent Suture with anchor positioned in the bone



Repair complete – Humeral head (ball) now centered in the Glenoid (socket)

## Patient's Recovery Plan

### The Day of Surgery

Maintain dressing. You may add 4x4 bandages if needed for drainage through dressing. Use ice pack for 20 minute periods throughout today. KEEP SLING ON AT ALL TIMES.

Move fingers and wrist often. Expect some swelling. If you have skin color changes or changes in sensation in your arm, notify the doctor. When sleeping, place 1 or 2 pillows under the operative side elbow to keep arm in place. Begin grip strengthening and wrist range of motion exercises tonight. (See exercise list below.)

Most patients find sleeping in a semi-upright position is more comfortable for the first few days after shoulder surgery. A reclining chair is often most comfortable.

**Post-op Day 1**: The Day after Surgery

Follow the same instructions as for the day of surgery noted above

**Day 2**: (48 hours post-operatively):

Remove the dressing. The Xeroform gauze strips (small yellow 'tapes') can be removed at the time of your first dressing change. You can shower with the dressing off. Do the elbow exercises and shoulder pendulum motion in the shower (see the exercises below.) Support the affected arm with the opposite hand. You may wash under the arm, but do not use a large amount of soap. Too much soap may dry out the skin and cause a rash. After a short shower, dry the shoulder well. Pat the incisions dry, don't rub the scabs off. Cover each incision with a plain Band-Aid. Do not use and creams or ointments on the incisions.

Resume same activities as surgical day; use ice for 20 min. periods as needed.

Exercise: Once a day, in the shower, you may begin to flex and extend your elbow, keep your arm close to your body, rub palm over stomach, keep palm facing inward. Do your elbow, wrist, and hand exercises at least 2 other times each day.

*The arm sling must remain on at all other times, including bedtime.*

**Day 3 - 4**: Start formal physical therapy program. Continue home exercise as listed below (adjust exercises as per therapist's instructions.

**Day 4 – 10**: Change Band-aids daily or as needed. Maintain sling use. Continue exercises as directed under Day 3.

**Day 7 – 10**: The first post-op visit: see Dr Reznik in the office. He will review your surgery with you and further instructions will be given for your rehabilitation and recovery.

## Exercises

Do three times each day as directed

**Starting Day 1**:
Hand Squeezes or Grip Strengthening: Using a small soft rubber ball or soft sponge, squeeze your hand. When in the shower, you can use a sponge filled with water. Do this for 3-5 sets of 10-20 repetitions each day. If this is too easy, later in the rehab course you can use a grip strengthener.
Wrist Range of Motion: Roll your wrist in circles for 30 seconds after each round of grip exercises.

**On Day 3 add**:
Elbow Range of Motion: Turning your palm inward, towards your stomach, flex and extend the elbow as comfort allows. This will decrease pain and prevent elbow stiffness.

**On Day 4 add**:
Pendulum Exercise: Holding the side of a table with your good arm, bend over at the waist, and let the affected arm hang down. Swing the arm back and forth like a pendulum. Then swing in small circles and slowly make them larger. Do this for a minute or two at a time, rest, then repeat for a total of 5 minutes, 3 times per day.

**Not before Day 7-10 add**:
Wall Walking: Stand facing a blank wall with your feet about 12 inches away. “Walk” the fingers of the affected hand up the wall as high as comfort allows. Mark the spot and try to go higher next time. Do at least 10 repetitions, 3 times per day. When more comfortable and stronger (not before three weeks) do these exercise sideways, with the affected side facing the wall. Walk your finders down the wall as well as up. If you will have weakness on the way down, so use the other arm to help.

**Important**: Do not let the hand drop down from the wall—this will be painful and strain the repair.

**Biceps Curls**: Curl the arm up and down 12 times; rest for one minute and repeat for a total of 3 sets of 12. When comfortable, try it holding a very small can. In a few days you can increase can size only as comfort allows. This exercise should not be painful. If painful decrease or eliminate the weight.

## General Instructions for Labral Repair Patients

You may resume a regular diet when you return home. Start with tea or broth and advance slowly with crackers or toast, then a non-spicy sandwich. If you become nauseated, return to clear liquids. You can also try Tums, Zantac or Pepcid AC to help settle your stomach. After surgery you are encouraged to deep breathe and cough frequently (at lease 3-4 times per day). This will reduce mucous from building up in your lungs and will reduce the risk of developing pneumonia.

**Pain Control**: Take medication as prescribed by Dr. Reznik. Do not take all your meds at the same time. Take anti-inflammatory medication with food to avoid stomach upset. Please call our office with any questions regarding your medication. After surgery, some patients will see some swelling. Use an ice pack for 20 minutes periods throughout the first 24 hours after surgery and then as needed for comfort and to reduce swelling.

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**Blood Clots**: Patients at high risk: These patients should be taking 1 aspirin per day for 6 weeks after surgery unless allergic to aspirin.

- Those with long car or train commutes
- May be overweight: BMI>30*
- Have a history of having cancer
- Females on birth control pills
- Males over the age of 40

(*BMI or Body Mass Index is a number calculated from a person's weight and height. BMI provides a reliable indicator of body composition. A muscle/ fat ratio if you will. The index is used to screen for weight categories that may lead to health problems.)

**Sling**: Patients are to wear the pillow sling at all times (including while at sleep) for the first 3 weeks. Then, it is recommended that patients wear the sling with the pillow removed when going out for the next 3 weeks. This will help to alert others to avoid the affected arm during this important healing period. Move fingers and wrist often. Expect some swelling.

**Dressing:** The Xeroform gauze strips (small yellow 'tapes') can be removed after 48 hours. At this time, you may shower with the dressing off. Do the elbow exercises and shoulder pendulum motion in the shower (see the exercises below). Pat the incisions dry, using care not to rub the scabs off and cover each incision with a plain Band-Aid. Do not use and creams or ointments on the incisions.

**Exercise**: You will begin simple exercises the day of surgery. They should be done every day for the first week post-op, to maintain blood flow and help prevent blood clots.
Your physical therapy will begin 3-4 days after surgery. The physical therapist will guide you in your shoulder rehabilitation program. It is very important for you to start therapy when recommended.

**Physical Therapy**: Vital to your recovery of good shoulder function is a graduated activity and exercise program to increase muscle strength and motion. To avoid complications, postoperative follow up appointments with your physician are also required to monitor your progress.

**Call the physician or go to the ER if:**

- You develop excessive, prolonged nausea or vomiting
- You develop a fever above 101
- You develop any type of rash
- You experience calf pain

**Driving**: Patients cannot drive until they are off all pain medications, completely out of the sling, and can easily place hands at 12:00 position on the steering wheel and can move hands freely from the 9:00 – 3:00 position.

**Airline Flights**: Patients may fly 2-3 weeks after surgery on short flights (up to 2 hours) but should in general wait 6-8 weeks for longer flights. You should get up and walk frequently to avoid blood clots and take an aspirin (unless allergic.)

**Returning to Work**: Patients with a small tear, and/or low demand work, can usually return to work within 3 weeks. They will still have restrictions on lifting and overhead use. Patients with higher demand jobs or repetitive arm use need at least 6 weeks. Any heavy labor with overhead lifting can take at least 4-6 months.

****Dental Work**: You cannot have any routine dental work (including cleaning) for at least 3 months after your surgery, or you risk infecting the suture anchors. After 3 months, you may see the dentist, but for one year from date of surgery, you will need to take antibiotics before and after dental work. Call our office, and Dr. Reznik will give you a prescription.


Revised 3/11/11