# **Shoulder Dislocation** (Anterior Glenohumeral)

Structural Yoga Therapy Course Boulder, Colorado July 2006

Mindy Lutz Lewis, Colorado (970) 749-7464 mindy@southwestyogatherapy.com

**Anterior Glenohumeral Shoulder Dislocation**By Mindy Lutz

# 1 – Case Study

# 1-a. Initial intake, review of symptoms, subjective pain level, self-assessment, goals

R.L. is a woman in her early thirties complaining of pain, limited range of motion and impaired strength as a result of multiple injuries, including two shoulder dislocations in two years. She is the director of a non-profit organization and her job demands a lot of desk time. She likes to lead an active lifestyle outside of work, exercising one to two hours per day on average. One of her major complaints is that her lifestyle has been impacted by her injuries, and she is unable to enjoy the activities (cycling, rowing, swimming, skiing, kayaking, weight training, etc.) that she used to. Before now she has had very little personal experience with Yoga.

R.L. first dislocated her right shoulder in Spring 2004 while playing basketball (force of opponent exerted on joint while in external rotation with abduction). She had her shoulder set, rested it and says she had no problem with it for a year. In April 2005 she re-injured her right shoulder (I suspect a partial dislocation: subluxation) while in the process of taking off a heavy backpack (35 lbs) after a long hike (external rotation with abduction and extension). This time she received no immediate medical attention, was able to "reset" the shoulder herself and simply rested it.

In addition to the weakness and discomfort in her shoulder she also complained of pain and stiffness in her right ankle, knee and hip. This pain is the result injuries sustained in a white water rafting accident in May 2005 when she had her right leg "crushed" between the raft that she was in and a boulder. She has been seeing a chiropractor regularly since the rafting accident. She also mentioned that her left knee feels stiff when she sits too long and complained of chronic stiffness in her neck. She told me that she is breaking herself of the habit of cracking her neck (self "adjustment") which she has been doing since high school. She does not know whether or not she would be able to stick with a yoga regimen because she has low normal blood pressure and gets lightheaded when she "tries to breathe slow."

R.L.'s shoulder pain increases throughout the day going from a 2-3 to a 7-8 on a 1-10 scale, and she often has difficulty sleeping because of it. The pain in her right hip increases after walking or other weight bearing exercise going from a low 2-3 to a high 6-7, as does the pain in her right knee and ankle. She says the stiffness in her right hip is worst when she wakes up. The feeling of stiffness and discomfort in her left knee increases when she sits too long.

When asked what her self-evaluation was and she said she "plays hard with no patience to heal." When asked what issues she would like to address with yoga therapy she said that first she wants to improve her ROM, increase her strength and reduce her pain. Then she wants to get in shape for a 4 to 6 week kayak trip in approximately 2 years.

Objective assessment. I suspect that R.L.'s original shoulder dislocation was not properly rehabilitated, resulting in shoulder instability. The second dislocation was definitely not rehabilitated properly, receiving no medical attention for almost a year when she finally got an x-ray which showed "no structural damage"—her words.

# 1-b. Physical assessment

Posture Body Reading. In standing evaluation I found R.L.'s SI was normal, her right shoulder and her head were carried slightly forward, her left hip was high, and her right foot turned slightly inward.

			2	2/27/06		5/18/06		7/5/06	
Range of Motion (av	verage RC	OM)	Left	Right	Left	Riaht	Left	Riaht	
Ankle dorsiflexion (20	))		20	8	22	20	20	20	
Hip abduction (45)			50	30	50	50	50	50	
Hip extension (15)			15	8'	20	20	20	20	
Shoulder extension (50)			58	35	52	50	55	55	
Shoulder flexion (180)			180	141	180	175	180	175	
Shoulder external rotation (90)			110'	86'	110	108	110	110	
Shoulder internal rotation (80)			88'	56	85	82	88	85	
Shoulder horizontal adduction (130)			140'	133	138	135	130	130	
Shoulder horizontal abduction (40)		50'	22	50	48	50	50		
2/27/06		5/1	5/18/06 7/5/06						
Muscle Testing	Left	Right	Left	Riaht	Lef	t	Riaht	]	
Shoulder, mid-	3.5	0.5	4	4	4		4		
Shoulder extention	3	1	3.5	3.5	3.5	5	3.5		
Shouder abduction	1.5	0.5	3.5	3	3.5	5	3.5		
Shoulder adduction	3	1.5	4	4	4		4		
Shoulder external	3.5	1	4	3.5	4.5	5	4.5		
Shoulder internal	3.5	0.5	4	3.5	4.5		4		
Shoulder flexors	3.5	2	3.5	3.5	4		4		
Latissimus Isolation	4.5	3	4.5	4	5		4.5		

# 1-c. Summary of findings

I found after our initial assessment that RL's range of motion was limited on the right side of her body in almost every test. She also tested relatively weak on the right side of her body. She has full range if motion on the left side of her body but is relatively weak in her hips and shoulders. Issues to address are both tightness and weakness on the entire right side of her body and weakness in her left and right hips and shoulders. She wants to safely increase the strength and flexibility of the right side of her body while maintaining the fitness of her left side gradually bringing both sides into symetry and balance. Due to the extent of her complaints, ancle, knee, hip, shoulder, neck, and the goal of full athletic strength and stamina within 2 years my first recommendation was JFS.

#### What is tight?

Right shoulder flexors, shoulder extensors, shoulder internal rotators, shoulder external rotators, shoulder adductors, shoulder abductors. Also upper trapezius and sternocleidomastoid

RL's right shoulder is quite tight in the movements of extension and flexion, internal rotation, and horizontal abduction. While her ROM measured almost "normal" in the movement of external shoulder rotation she felt apprehensive in the test position and her ROM fell 24 shy of her ROM on the left. Our major objective will be to restore her safe, pain free range of motion using the JFS.

#### What is weak?

Left middle trapezius, shoulder extensors, shoulder abductors, shoulder adductors, shoulder external rotators, and shoulder internal rotators
Right middle trapezius, shoulder flexors, shoulder extensors, shoulder internal rotators, shoulder external rotators, shoulder adductors, shoulder abductors, and latissimus

Concitering her athletic lifestyle, RL's left shoulder tested relatively weak in all movements. Her left shoulder abductors (posterior deltoid, infraspinatis, triceps brachii—long head) tested very weak. Her right shoulder tested very weak in all movements. In order to stabelize her injured shoulder and to protect both shoulders from future injury our goal is to strengthen all fifteen muscles that act on the shoulder joint. Of these, four short muscles (teres major, supraspinatus, infraspinatus and subscapularis) are particularly important to shoulder and arm movement. They cross the joint to insert into the humerus, thereby also helping to stabilize the shoulder joint. We will begin this process with JFS, adding static and dynamic asana practice as appropriate.

#### What muscles need release?

A more experienced therapist might have found that some of the muscles in R.L.'s neck and shoulder region need to be released. I, however, did not.

#### 1-d. Recommendations

**2/28/06** During our initial assessment I noticed that R.L. was experiencing apprehension in certain motions. Shoulder external rotation and shoulder flexion both seemed to frighten her, most likely fear of a repeat injury. After our conversation and initial assessment, we began our session with a Heart Salutation and Wave Breath to increase her breath awareness, strengthen the lungs, diaphragm and intercostals and to begin to quiet her mind and to turn her attention inward. I also recommended JFS very gently with her awareness directed inward paying very close attention to the sensations within. I cautioned her against working through pain using the "yellow light means back off" metaphor and gave her permission to take extra breaths while becoming familiar with the routine, focusing more on steady, full and regular breathing rather than "slow." Due to limited range of motion in her knees and hips, I recommended that JFS 9-15 be done standing. I also suggested doing JFS 13, 14 and 15 one arm at a time to reduce the temptation to push her right shoulder beyond where it wanted to go. I also recommended that R.L. always finish with Savasana, a time to soak up the benefits of her practice.

**3/10/06** RL has practiced JFS 6 times since our last session, about every other day. After a brief conversation, we again began our session with Wave Breath, beginning to introduce Ujjaye Pranayama. We then went through JFS. I had her focus on her awareness into the muscles that were working in order to accomplish each movement of the routine. She was beginning to get the hang of following her breath, allowing it to lead her through the movements. I added Warrior I, Warrior II, Upward Stretched Legs Pose using a bolster above her right shoulder to support her arm and give a feeling of safety in Shoulder Fexion, Abdominal Twist, Boat (3-5 breaths each) and Energy Freeing Pose (12-24 breaths) to her routine, followed by Savasana (5 min), Heart Salutation and Yoga Mudra. I also suggested that she incorporate "yoga snacks" into her day at work.

**3/19/06** R.L. has continued to practice regularly, about every other day. She says her hip felt extra stiff today after a session with her chiropractor yesterday evening. After a brief conversation, we began our session with a Heart Salutation, then I observed her through Wave Breath, encouraging her to give her belly permission to expand with her inhalations, then to gradually lengthen her breath, allowing it to become a wave of awareness within her. After about 5 minutes, she released a deep sigh with some neck movement. Then we proceeded through her routine. I offered modifications for JFS 14 suggesting she could try keeping her back to a wall to feel more stable, focusing on feeling the strength of her muscles throughout her ROM. We finished with Yoga Nidra, Heart Salutations and Yoga Mudra.

**4/04/06** R.L was just back from a long car trip and had not practiced for 5 days. Her hip felt stiff, and her shoulder hurt. After a brief conversation, I had her lie comfortably on the table with her knees on a bolster and covered her for warmth. We began with a Heart Salutation then Yoni Mudra and Wave Breath. After about 5 minutes I applied gentle traction to her occipital bone and had her breathe all the way down into her feet. After release we removed the blanket and I guided her gently through JFS on the table with focus on moving with her breath. We finished with Yoga Nidra under the blanket, Heart Salutations and Yoga Mudra.

**4/19/06** R.L. has practiced 6 times since our last session, only once this week. She had a busy week and her shoulder felt a bit stiff from sitting at her desk. Her hip felt good and she wanted to build lower body strength. After a brief conversation, we began with a Heart Salutation then Ujjaye Wave Breath, focus on turning attention inward and calming the mind. Then on to JFS. I offered a modification to increase overall conditioning by doing JFS Asanas 9-15 from a modified 1/2 Forward Bend with knees bent, hamstrings engaged, and a natural lumbar curve to engage psoas. Her symmetry was so improved that I suggested she try JFS13, 14 and 15 on both sides at once. I added a dynamic version of Side of Hip Stretch using hands on a wall or counter to gently open her chest, stretching her shoulder extensors gently, reminding her to keep her shoulder region strong, and a transversal rocking motion of the pelvis (inhale, hip up; exhale, hip down). I also added Rolling Bridge encouraging her to feel the strength of her shoulder extensors and the control of her abdominal muscles, and 1/2 Locust, 4 breaths on each side. We finished with Savasana, Heart Salutation and Yoga Mudra.

**5/19/06** After a brief conversation, we began our session with a Heart Salutation, then I did another assessment the results of which are on the tables above. R.L was very happy to see such noticeable results in such a short time from a satvic level of effort. She has continued to be consistent in practicing 3 to 4 times a week and has also begun to cycle again.

I observed R.L. through Ujjaye Wave Breath noticing how free her breath seemed to be, then we worked through her routine. I added Cat Bows, having her go only halfway down while working on good form, Triangle Pose and Supported Shoulder Stand with emphasis on strengthening the upper thoracic region. We finished the session with Savasana, Heart Salutation and Yoga Mudra.

**6/21/06** After a brief conversation, we started our session with a Heart Salutation and Ujjaye Pranayama. R.L. has done really well, feeling fit and strong enough to cycle regularly and incorporate weight training into her lifestyle. Observing her through Pavanmuktasana, I noticed that her energy was moving really well, her breath had become full and deep and long; she has had no trouble with light-headedness. She was moving smoothly with her

breath and her symmetry had become quite good. The discrepancies between her left and right sides had become subtle. I added Dandasana and West Side Back Stretch to her routine. We finished with a brief Savasana (5 min) and a Heart Salutation.

#### 1-e. Results of recommendations

**3/19/06** I measured shoulder flexion, internal rotation and external rotation and noticed an increase in ROM after less than 3 weeks.

Right shoulder flexion (2/28 **141'**) 3/19 **165'** Right shoulder internal rotation (2/28 **56'**) 3/19 **71'** 

**5/19/06** We did another assessment (results can be viewed in the second column of the chart) re-testing all of the areas that were tight or weak. R.L. showed remarkable improvement on her right side in all tests. Her ROM was normal or beyond (which is normal for her) and all ROM tests showed nearly symmetrical results. Her strength has also improved dramatically. Although she is still a bit stronger on her left side she is no longer extremely weak in any test and shows athletic strength in most.

**7/5/06** We did this most recent assessment after R.L.'s first appearance at one of my public yoga classes. She said she was "absolutely on cloud nine through the entire class because before she started her work with SYT she did not think she would ever be able to keep up in a "regular yoga class." She commented on how good it felt to feel strong and capable. The results can be viewed in the third column of the chart.

Also, when a new student saw my massage table and I explained that RL and I had a Yoga Therapy session immediately following class, she asked, "Oh, what is Yoga Therapy?". RL's face lit up and she said without hesitation, "It is this *amazing* way to *heal*, and to *stretch*, and to *strengthen* and just to feel ...it's great! It's really great."

When asked about her pain level, R.L. said it still comes and goes in her shoulder. In general it is very mild, 0-1, occasionally as high as 3 (that was after a day spent raking and lawn mowing with a push style mower).

She also told me that her hip, knee and ankle were no longer bothered by weight bearing exercise and no longer seemed to trouble her at all.

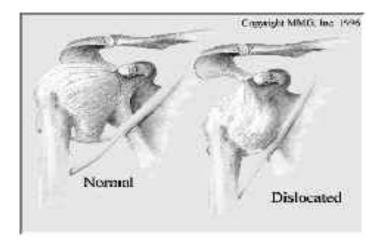
# 2-a. Name and description of the condition



Shoulder dislocation: actual photo



Shoulder dislocation: X-ray and graphical representation



Shoulder dislocation: graphical representation

The shoulder joint is the most frequently dislocated major joint of the body. In a typical case of a dislocated shoulder, a strong force that pulls the shoulder outward (abduction) or extreme rotation of the joint pops the ball of the humerus out of the shoulder socket. Dislocation commonly occurs when there is a backward pull on the arm that either catches the muscles unprepared to resist or overwhelms the muscles.

According to Taber's Cyclopedic Medical Ddictionary:

Dislocation of shoulder: A condition in which the head of the humerus is displaced beyond the boundaries of the glenoid fossa. See: Hill-Sachs lesion.

Etiology: The most common cause is from trauma with the arm in external rotation with abduction, causing the head of the humerus to sublux anteriorly (Anterior glenohumeral dislocation); a posterior subluxation may occur from a fall on an outstretched arm. An inferior dislocation may occur from poor muscle tone as with hemiplegia and from the weight of the arm pulling the humerus downward. Anterior glenohumeral dislocations are common among athletes, especially football players.

Treatment/First Aid: An x-ray is needed to determine the type of dislocation and the presence of any fracture. If no fractures are present, one of several maneuvers can be used to reduce the humerus into the glenoid.

Patient care: Because of the potential damage to neurovascular structures as they cross the glenohumeral joint line, the vascular and neurological status of the arm and hand must be assessed. A decreased or diminished ulnar or radial pulse warrants immediate intervention and reduction of the dislocation. An anterior dislocation of the shoulder can be reduced, for example, with passive traction on the arm or by placing the patient in a supine position and medially displacing the scapula.

Copyright 2005 by F. A. Davis Company

When the glenoid dislocates, it is very common for there to be damage to the articular surface. Basically, while either dislocating or during relocation, the head of the humerus strikes the bony rim of the glenoid. This results in a Hill-Sachs lesion. X-rays are necessary after a dislocation to determine if this lesion is present. Treatment of a shoulder dislocation with a Hill-Sachs Lesion is more conservative to prevent further damage to the articular surface of the humerus. This dent can lead to premature arthritis of the shoulder if not treated properly

Chronic subluxation or recurrent shoulder dislocations may be much less painful. This pattern usually happens against a background of lax shoulder ligaments and a history of a previous initial acute severe dislocation.

When a shoulder dislocates frequently, the condition is referred to as **shoulder instability**. A partial dislocation where the upper arm bone is partially in and partially out of the socket is called a **subluxation**.

# 2-b. Gross and subtle body common symptoms

Problems seen with a dislocated shoulder are tearing of the ligaments or tendons reinforcing the joint capsule and, less commonly, nerve damage. Doctors usually diagnose a dislocation by a physical examination, and x-rays may be taken to confirm the diagnosis and to rule out a related fracture. Over the next few days, the shoulder becomes more painful. This may be due to increasing inflammation and fluid accumulations from the damaged tissue as the immune system begins to cope with the recent damage. This can appear as extreme tension or rigidity of the muscles, guarding of the injured area, and fear of using the joint or affected area. Night pain becomes increasingly more noticeable when trying to sleep. For several weeks it is hard to find a comfortable position for the injured arm. This pain eventually subsides; however, fear and gaurding may persist. The body cannot move on and heal if it is still in a traumatic state.

#### 2-c. Related challenges: lifestyle, diet, limitations on activities

As with all conditions your Health Care Practitioner should be consulted. Following the first episode of joint dislocation, treatment normally involves conservative management. Surgery is not usually considered until after the second or third episode. Conservative management involves rest, a period of support in a sling with the arm close by the side and decreasing inflammatory reactions with ice and other anti-inflammatory agents. Initially, it is crucial to avoid the position that caused the dislocation, due to the high risk of recurrence. In all cases, a rehabilitation program is necessary to re-educate and strengthen the surrounding muscles, to correct joint mechanics and to retrain movement patterns. Shoulder dislocations are serious injuries and, if one is suspected, you should seek professional medical advice.

Shoulder dislocation and instability affects people differently at different ages. In young people, a shoulder dislocation almost always results in future dislocations (83-90% of subjects aged 20 years or under). For people aged 20-40, the likelihood of future dislocations is lower after a first-time episode (60-63% of subjects aged between 20-40). In people over 40 dislocation seldom recurs (10-16% of subjects aged 40 years or older). However, in people over 40, a dislocation usually results in a rotator cuff tear as well. In these cases, the rotator cuff tear is the primary lesion. For this reason, the average age of people with primary dislocation is around 48 years, while for people with recurrent dislocation the average age is only about 23 years.

One contributing factor for this age difference is the changes in collagen that occur as people grow older. In newborns, Type III collagen is produced and the fibers formed from this type of collagen are supple and elastic. With each passing decade, collagen-producing cells make less Type III collagen and progressively convert to synthesizing another form of collagen (Type I) which has different characteristics. Type I collagen contains sulfur groups that have a high tendency to cross-link and form bridges between the collagen filaments, causing the fibers they comprise to be relatively tough and non-elastic.

#### Diet tips

Eat a healthy, well-balanced diet from a wide variety of food groups to maximise the repair process.

- Eat plenty of breads and cereals (preferably wholegrain), vegetables and fruits.
- Eat plenty of good quality oil and ghee to lubricate the injured joint.
- If you drink alcohol, limit your intake.
- Eat only a moderate amount of sugars and foods containing added sugars.

- Choose low salt foods and use salt sparingly.

Drink plenty of fresh juices made from raw vegetables such as beetroot, garlic and radish.

Raw vegetables are high in valuable vitamins and other nutrients that will assist in bodily repair processes.

#### Vitamins/minerals/herbs

- Vitamin C with bioflavonoids helps to reduce inflammation and repair connective tissue and collagen after injury.
- Evening Primrose Oil contains gamm-linolenic acid (GLA) which is a building block for antiinflammatory chemicals in the body.
- Vitamin A and vitamin E help to repair connective tissue and cells.
- Bromelain can help reduce acute, painful inflammation following soft tissue injuries.

# 3 – Ayurvedic assessment and Ayurvedic based yoga recommendations for the condition

# Vata, pita, kapha

The shoulder joint is a kapha structure (Shleska Kapha), and trauma (dislocation) is a vata imbalance, so dislocation is a case of vata pushing kapha. The resulting instability of the joint and the inconsistent pain also indicate a vata imbalance in a kapha structure. Throughout our work together, I have been advising practices to balance both vata (warmth, breathwork, Ujjaye pranayama—adhya vata, gentleness, massage) and kapha (strength, static asanas, smooth, steady movements, Pavanmuktasana—shleshaka kapha), and the results have been health and balance.

Trauma is a vata imbalance. This can appear as extreme tension or rigidity of the muscles, guarding of the injured area, mental fear of using the joint or affected area, and pain. The body cannot move on and heal if it is still in a traumatic state. Balancing vata prepares the body, and is the first step in healing.

Focus on the dosha present in the injured joint.

Vata Cold, Dry, Airy, Unstable Creaking, Popping	<b>Pita</b> Hot, Fiery Inflammation, Redness	Kapha Heavy, Slow, Dense Swelling, Stiffness,
Inconsistent Pain	Sharp, Burning Pain	Immobility Dull, Aching Pain

The next step is to to bring balance to kapha by building strength. With shoulder dislocation flexibility has gone up in an extreamly inapropriate way, resulting in trauma. People with a shoulder mobility that is well beyond normal ROM are also paticularly susceptable to dislocations and shoulder instability and need to be very strong to protect their joints.

# 4 - Common body reading

# Signs and symptoms

- Shoulder movements are extremely difficult due to pain and weakness.
- Extreme pain surrounding and within the shoulder joint.
- Pins and needles or numbness down the arm, especially if the neural (nerve) tissue or blood vessels have been affected.
- Immediate swelling within the shoulder region.

GH Dislocation can occur from numerous causes, most often the shoulder is placed in abduction and external rotation. Since this is the most common mechanism of dislocation, the common test for shoulder instability is to place the patient in this position. This is commonly referred to as the shoulder aprehension test. A positive test manifests itself by pain and fear of another dislocation by the subject. Also, the therapist may feel the head of the humerus slide forward during the test.



www.athleticadvisor.com/Injuries/UE/Shoulder/dislocation.htm

# 5 – Contraindicated yoga practices and general activities to modify or eliminate

First and foremost, the shoulder in question must be immobilized for 4-6 weeks. During this time, it is absolutely critical to avoid the motion that caused the dislocation. In 97 percent of cases, this means external rotation with abduction. Once the acute phase is passed, it is very important to proceed gently. Throughout, the client should work within his/her pain-free range of motion. When measuring ROM or testing muscles, be extremely delicate, particularly in shoulder external rotation, shoulder abduction, shoulder flexion and shoulder internal rotation. Be sure to give the arm plenty of support so that its weight does not stress the joint. Also, be clear with you client. Have a conversation with them explaining what to expect. Be sure that they understand that these tests are not supposed to be painful, e.g., "We're measuring your pain-free range of motion." Move incrementally, slowly, frequently asking, "How do you feel? How does that feel?" Watch their face for signs of anxiety. Do not break contact with them until their arm is in a safe, comfortable position by their side.

Contraindicated yoga practices will change as therapy progresses. To start with, avoid any poses that involve weight bearing in hands with shoulder flexion ie:downward facing dog, dolphin, handstand, shoulder extension ie: chauranga, or external rotation ie: vashistasana.

#### 6 - General recommendations for the condition

#### 6-a. Therapeutic/free of pain

Doctors treat a dislocation by putting the ball of the humerus back into the joint socket, a procedure called a reduction. This should only be done by trained medical professionals to

avoid damage to nerves, arteries, and veins. Because of the potential damage to neurovascular structures as they cross the glenohumeral joint line, the vascular and neurological status of the arm and hand must be assessed. A decreased or diminished ulnar or radial pulse warrants immediate intervention. The arm is then immobilized in a sling or a device called a shoulder immobilizer for several weeks. Usually the doctor recommends resting the shoulder and applying ice three or four times a day. After pain and swelling have been controlled (4 to 6 weeks), the individual enters a rehabilitation program that includes exercises to restore the range of motion of the shoulder and strengthen the muscles to prevent future dislocations.

# 6-b. Stabilize situation and lifestyle change recommendations

The major objectives of rehabilitation of a dislocated shoulder are to increase flexibility, establish pain-free range of motion, and strengthen the fifteen muscles that act on the shoulder joint. Of these, four short muscles (teres major, supraspinatus, infraspinatus and subscapularis) are particularly important to shoulder and arm movement. They cross the joint to insert into the humerus, thereby also helping to stabilize the shoulder joint. The tendons from these muscles form a rotator cuff which surrounds the capsule and blends with it. The interior of the shoulder joint also has sites for attachment for three other muscles required for arm movement: triceps, biceps, and deltoid. Activity that causes shoulder pain should be avoided altogether. Strengthening the weakened muscles will help to restore balance. By now, the shoulder muscles may also have developed "knots" or small spasms which can limit the extent to which the arm can be moved. A massage therapist can massage out these knots to help regain your normal movement. Rehabilitative exercises should be performed on both sides of the body to achieve and maintain symmetry in the strength and range of motion of the back, chest, and upper arms. In many individuals, the tendency to experience shoulder dislocation is present on both sides, so doing these exercises to increase the pain-free range of motion and improve strength of both shoulders may help prevent further injury to either shoulder.

After treatment and recovery, a previously dislocated shoulder may remain more susceptible to reinjury, especially in young, active individuals. Ligaments may have been stretched or torn, and the shoulder may tend to dislocate again. A shoulder that dislocates severely or often, injuring surrounding tissues or nerves, usually requires surgical repair to tighten stretched ligaments or reattach torn ones.

# 6-c. Maintenance and long term considerations

Shoulder dislocations, when treated properly, will heal with very little complications. First-time dislocations, particularly in the young athlete, need to be treated appropriately to prevent shoulder instability.

Studies have shown that a first-time dislocation, without labral tears, will heal in 6 to 8 weeks with out residual laxity. The key to optimal recovery is early immobilization of the shoulder for 4 to 6 weeks. This is followed by 6 to 8 weeks of graduated rehabilitation exercises to strengthen the rotator cuff and other shoulder muscles.

If the first time dislocation is allowed to return to participation too early, the shoulder ligaments will not be allowed to heal properly. This can result in shoulder instability: repeated

dislocations with less and less force each time. (A partial dislocation where the upper arm bone is partially in and partially out of the socket is called a subluxation.) Each subsequent dislocation can result in joint surface damage. Also, the more times a joint is dislocated, the more difficult a surgical reconstruction can be.

Shoulders that dislocate due to genetically loose ligaments may suffer the same long-term damage as an inappropriately treated first-time dislocation. These individuals may or may not benefit from surgical reconstruction. Each person's results differ in response to the surgery. In some cases the tightened ligaments loosen back to normal length.

The best long-term maintenance strategy for individuals at risk for shoulder instability is consistent exercise to maintain strength in the entire shoulder region.

# 7 – Questions and Answers from www.yogaforums.com

Posted: Sun Oct 23, 2005 8:48 Post subject: shoulder subluxation

Q:Hi Mukunda, I have a shoulder problem I wouldn't mind some advice on: my shoulders are my weakest point. They are very stiff, and the muscles are also always tight. They relax after a massage but only for a few hours. I dislocated my right shoulder, so i stopped practicing yoga for a bit and then started again but very gently. It has now healed and I have found it to be a lot better generally. Now the other shoulder has done the same thing, I have a subluxation. It is much more painful this time, and hurts to take off a t-shirt for example. I have rested it and got to the point where I can do gentle things with it, but as soon as I think it's ok, it happens again. Conventional medicine hasn't been able to do anything for me, and my osteopath has also tried in vain. I don't know what else to try. Clearly it needs to get stronger, but how can I work on that when it keeps reverting to being really painful again. I practice ashtanga and I've cut out anything that puts pressure on the shoulders. This means it doesn't get worse, but it doesn't get better either. Thank you, Marie-Claire

"The state of severance of union with sorrow is known by the name of yoga." (Bhagavad Gita)

Posted: Sun Feb 02, 2003 10:10 am Post subject: Shoulder position

Q: Hi.

I have been reading Structural Yoga Therapy (SYT). I enjoy it greatly. thank you very much.

I have been practicing yoga for about 2 years and dealing with lower back problems for 3 years.

I have many questions. I will submit them separately so that the individual Q&A may benefit others. I suspect that my questions are likely to be considered elementary. Forgive me, I do not have a teacher or anyone (other than a PT who is a yoga therapist) to help me.

In Warrior I and Joint Freeing Series (JFS) shoulder flexion, should the shoulders be raised as in maximizing the height of the fingers, or should the shoulders be held in the oft-phrased "down and back".

This is different than the upward and slightly backward spinal extension found in many Sun Salutations?

#### Thanks

A: This motion is an isolated movement intended to affect only the shoulder joint. Therefore the scapula should go back and down rather than lifting with the arms. In the sun Salutation, the motion is not an isolation of the shoulders but rather shoulder flexion plus spinal extension. By doing a backbend the shoulder girdle will be in a fixed position. mukunda

# Posted Wed Jan 11, 2006 Post subject: shoulder and neck pain & JFS

Q: I had pain around the right side of neck and right shoulder for several years working long hours at the computer (my education was delivered/relied on the computer). I continue to have this pain whenever I use the computer or do chores where I have to stretch out my arms or raise my arm. A pop and grating can be heard at the back of my neck and pops as well when I move my shoulder. I frequently do all chores and carry groceries(I live alone), I seemed to have strained my other left side of neck and shoulder as well. Now my upper back feels tight. It did not worsen this much when I was staying with my family. I think my delicate frame is not strong enough for many activities. Now I have used a proper chair and adjusted height of my computer which seem to lessen the pain on the right side.

I did the JFS which I feel seem to release much of the tightness and pain, although I could hear the clicking while doing them. I felt like a weight has been lifted away during and immediately after the session. Then, when I start to move my arms again for one or two times for my errands, the pain would come back.

I could not stop my chores as there is no one else to do them. How can I fully benefit from the JFS even after the session? Should I have to stop certain movements of my upper body daily for a while?

A: I would suggest you do the JFS very slowly and learn to focus attention on the currents of sensation in your body. They are likely to be pronounced not just the specific joint you are addressing but at diverse regions. So encourage that awarenes. As long as your body is having a discharge of strain, pain or spontaneous motions (kriyas) keep doing whatever you are doing. just be gentle. If this is the way your body is healing then send me personal email to <a href="mailto:yogimukunda@comcast.net">yogimukunda@comcast.net</a> and begin the Tantra lessons they can deepen this subtle body reaction to more effective JFS.

If you fatigue while doiing JFS then you simply need persistence to build muscle tone. In that case follow guidelines in SYT book chapters 17 & 18 . if tone is not coming by being progressive then it is a sign that rest is appropriate. Often rest is needed when injuried tissue is recovering from phsyiological changes of stress leaving your body. The joints are often where pre arthritis changes are stored. if that is the case then search this site for arthritis diet 10 day cleanse. namaste m

Posted: Thu Mar 23, 2006 3:16 pm

Post subject: cat bows

#### Q: Hello there!

I taught cat bows to my class today and 3 students struggled a lot. I taught it exactly as you describe it in your book SYT.

What is a good way to help them build those muscles?

Should I look through the joint freeing series and do movement that build those same muscles?

I also struggle somewhat with cat bows- I find them very challenging and jfs to be very doable so I'm wondering if there's something in between the jfs and cat bow to build the challenge slowly?

Also, a student has hyper flexible elbows- they go about 30 degrees back wards when she straightens them.

Should I encourage her to not straighten them all the way and strengthen biceps and triceps to support them in their not fully straightened position?

Also, I absolutely love (and use all the time) your book SYT. Is there another book that has similar detail and/or accuracy that you'd recommend that includes more/other asanas?

Thank you immensely for your fantastic work.

Have a blessed day.

A: For those who are weak, which is high percentage; have them go only half way down but work on good form. That is chest should lead the motion with pelvis following. This will tone the latissimus. Gradually next step is to move forward as you come down. This will build lower trapezius and fuller range of latissimus and triceps as shoulder extensors. The situation is that students are weak in upper arms and upper back. In other systems motions from downward dog to chaturanga builds this. but it is so challening that many will strain shoulders, elbows or wrists. Remember you don't want to feel the stress of challenging poses in your joints but muscles.

The JFS does not realy build these muscles too well but movement 6a - cat and 16a spinal extension to some degree are the basic foundation for tone here.

Your student sounds like she has hyperextended elbows this weakens the biceps and triceps. remedy is keep elbows slightly bend especially in weight bearing poses.

There is no other book like SYT that i am aware of. Some other anatomy books are helpful though to complement it such as Anatomy of Motion by Calais-Germaine and The Concise Book of Muscles by Chris Jarmey (which i like the best). thanks for your Q and praise. namaste mukunda

#### 8 - References

#### **Print**

Hewitt, James. *The Complete Yoga Book: Yoga of Breathing, Yoga of Posture, and Yoga of Meditation.* Schocken Books, New York. 1977.

Lad, Vasant. *The Complete Book of Ayurvedic Home Remedies*. Three River Press. New York. 1999.

\_\_\_\_\_\_. *Textbook of Ayurveda: Fundamental Principles*. The Ayurvedic Press, Alburquerque, New Mexico. 2002.

Stiles, Mukunda. *Ayurveda Concepts*. Unpublished manuscript.

\_\_\_\_\_\_. *Structual Yoga Therapy: Adapting to the Individual*. Weiser Books, Boston, MA/York Beach, ME. 2003.

\_\_\_\_\_\_ and Genevieve Ryder. *Structural Yoga Therapy™ Examination Manual*. Third Edition © 2005.

\_\_\_\_\_\_. "Wings of the Heart." *Yoga International: Yoga Therapy for Knees & Shoulders*. p 10. [No date indicated.]

\_\_\_\_\_. *Ayurveda and Yoga Therapy*. Unpublished manuscript.

\_\_\_\_. "Yoga Therapy for Shoulders." *Yoga International: Yoga Therapy for Knees &* 

#### **Web Sites**

Athleticadvisor.com/Injuries/UE/Shoulder/dislocation.htm

actual picture, graphical representation, x-ray, and apprehension test

http://au.health.yahoo.com/search/index.html?p=shoulder+dislocation&t=health&x=25&y=7
Nice definition

Healthlink.mcw.edu/article/926060431.htm

Shoulders. p 13. [No date indicated.]

Signs and symptoms of GH shoulder dislocation.

Sportsmedicine.upmc.com/InjuriesDislocatedShoulderRehab.htm

How long will the effects of the injury last?

Treatment-for.com/shoulder-dislocation.htm

Age related chance for chronic subluxation / shoulder instability.

Yogaforums.com

Yoga Therapy for shoulders.

#### Other Resource

The National Institute of Arthritis and Musculoskeletal and Skin Diseases, http://www.niams.nih.gov/

Search provided links to many helpful articles. There is a lot of information here on many topics.

#### 9 - Appendix [none]

# 10 - Biography

Mindy Lutz became interested in Yoga Therapy after experiencing firsthand the healing effect of her Yoga and Meditation practice on the multiple levels of her Being after a history of trauma. She has been a sudent of Yoga since 1994 and has been fortunate enough to study with some very amazing teachers including Mukunda Stiles. She has been teaching public Yoga classes since 1998 and pursuing Yoga Therapy as a career since 2004. Mindy is a Colorado native born and raised in Boulder, Co. In 1998 she moved with her husband, Doug, to "the old home place" in Montezuma County. Their daughter, Veronica, currently represents the 6<sup>th</sup> generation of her family to live on their 80-acre organic farm in Lewis, CO.