

Post ACL Surgery Pain

Structural Yoga Therapy Course

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Elizabeth Cooper Rajeshwari Seay

Clarkesville, GA

706.688.9642

antahsara@gmail.com

1 - Case Study Details - Simone

1a. Intake, Review of Symptoms, Pain Level, and Self-Assessment.

Simone is a 60 year-old female who stands 4 foot 10 inches tall. At the time of intake she reported a lifelong “torking” of the right hip which causes right side problems, as well as neck, right shoulder, right wrist discomfort and chronic right knee pain. The knee pain is attributed to post ACL re-construction surgery. The right knee pain has prevented Simone from re-establishing a regular asana routine. Her stated objective and expectation is “a quality life with out pain”. Simone would “like to be able to do things without a partner”. She has had “life long (physical) challenges” and sought help from various forms of chiropractic since her twenties until she “gave up the idea that chiropractic helps” some time in her 40s. Subject injured her right knee vaulting a fence in 1995; she avoided surgery for a year, but ultimately she had ACL surgery in 1996. Before her ACL surgery, Simone fell as a result of her knee instability and fractured her right wrist.

At the time of her intake, she rated her pain a 3 on the analogue pain scale, with sensation focused mainly in the hip and also radiating down from the shoulder to the wrist. Subject’s medical history includes childhood asthma. Subject mentioned a “slight thing with bone density”, and elaborated that the doctor counseled her not to put too much faith in the test, as these tests were designed for larger women and Simone was of such small stature.

Subject is divorced with no children. Simone has a 10 year long meditation practice that she describes as intermittent, with mornings being a hard time for her to build her sadhana due to joint pain, but does do a sitting practice most evenings. Simone used to enjoy water aerobics and yoga asana, but lately her exercise is walking her dogs up and down the many hills around her house. Simone was a modern dance major in college but no longer dances. She says that she lacks direction, stating, "I miss teaching children, it kept me buoyant, I am very service oriented and I need to feel purposeful. I don't feel purposeful now".

Speaking of her past she said, "I was never comfortable (in myself), you either sleep or you are active". She has sought many remedies for her discomfort, from chiropractic to studying with many different spiritual teachers. Simone calls John Roger her teacher and says that they worked mainly with the sound 'hu' in the Eckankar method, but that she was unhappy with her personal effort level. "I've been impulsive, but I'm pretty steady now." Simone tends to speak circuitously and a great deal. She has a long history of depressive episodes, and tends to "disappear" socially for periods of time.

b Physical Assessment

At the time of her intake, Simone's left shoulder was high and her left SI joint moved downward while the right was frozen. She is knock-kneed, and tends to stand with knees in hyperextension. Both ankles have are hyper mobile in inversion. Her left leg was 1/2" longer than the right on this day, a muscle imbalance was suspected.

Table 1 (Black boxes denote less than standard ROM)

Joint Action	ROM	2/10/2015	
		Left	Right
	Normal		
SI test		goes down	frozen
SI re - test		less downward motion	some downward motion
leg length		1/2" longer	
ankle dorsi flexion	20°	15°	17°
ankle plantar flexion	50°	45°	50°
ankle eversion	20°	20°	18°
ankle inversion	45°	60°	60°
knee flexion supine	150°	150°	137°
internal hip rotation supine	35°	32°	28°
hip adduction IT band test	45°	40° felt in left SI	45°
hip abduction	45°	45°	45°
leg length		1/2" longer	
hip internal rotation prone	35°	38°	32°
wrist flexion	90°	90°	80°
neck extension	55°	48°	
muscle testing assessment	1 - 5		
psoas isolation test		3	5
sartorius isolation test		5	2 - 3
internal hip rotators		3	4
hip adductors		3	4
alternate internal hip rotators		2	3
shoulder adduction		3	5
shoulder flexion		5	3

c Summary of Findings

February 9th, 2011

Simone's assessment revealed a high left shoulder, and her left upper trapezius and levator scapular are suspected to be tight, with left lower trapezius, latissimus and pectoralis sternal suspected weak. Her shoulders are medially rotated, and both palms face backwards when standing in tadasana, which indicates tight pectoralis, latissimus and teres major with weak teres minor and infraspinatus. Simone's right wrist flexion was less than standard ROM, indicating hypertonic extensor carpi radialis brevis and longus, and extensor carpi ulnaris, in addition to weak flexor carpi radialis and ulnaris and palmaris longus. Her neck extension was less than standard ROM, pointing to tight upper trapezius and weak sternocleidomastoid. Subject's left side shoulder adduction was weak, as well as her right shoulder flexion.

Subject's ankles are hyperflexible in inversion, with no reported previous ligament injury. Both ankles have less than standard ROM dorsi flexion, indicating weak tibialis anterior and tight tibialis posterior. Gastrocnemius is tight with peroneus longus and brevis weak. Muscle testing revealed a weak left psoas and weak right sartorius. Simone's internal hip rotators and hip adductors were found weak. At the time of her intake, Simone's left SI joint moved downward while the right was frozen. Her left leg was 1/2" longer than the right. Subject had less than standard ROM in prone internal hip rotation, indicating weak gluteus medius, gluteus minimus and tensor fascia lata. This is also suggested by the subject's knock-knees and tight adductors.

d Recommendations

February 9th, 2011

At our initial meeting, Simone was given the SI stabilizer, along with Joint Freeing Series #5. This was to be followed with a deep squat (see appendix). I asked Simone to be especially present during this exercise to maintain knee comfort and safety. This was to be followed by the windshield wiper move to strengthen internal rotators and lengthen the tensor fascia lata and gluteus medius, as indicated by Simone's knock-knees. By strengthening her ankles and gaining full ROM in both hips and ankles, Simone should be able to take pressure off of the right knee.

To address the weak hip adductors, Simone's next prescription was to lie on her side bending the top knee and allowing that knee to come to the mat, while lifting the straight bottom leg, repeating this for both sides. Also prescribed was supported matsyasana to open the tight pectoralis, finishing with the neck exercises found in the Mukunda Stiles' Joint Freeing Series. All repetitions were prescribed starting at 6 and up to 12.

March 2nd, 2011

b Physical Assessment

See Table 2

c Summary of Findings

Simone attained normal ROM in right ankle dorsi flexion and plantar flexion by the second meeting. She achieved normal knee flexion in the right side supine test. Her hip adduction was normal ROM in the IT Band test. By this meeting her leg length discrepancy was reduced to the left leg being only 1/4inch longer than

the right. Her right wrist was now at normal ROM, and neck extension ROM was also normal. Her right psoas, right internal hip rotator, and shoulder flexion had all gained strength in the muscle testing assessment. Her left psoas remained unchanged at about a 3, but her left internal hip rotator, her left hip adductor, internal hip rotators, and shoulder adduction had all gained strength.

d Recommendations

In our second meeting, Simone felt that she had enough time to do the full Joint Freeing Series 3-4 times per week in addition to the first recommendations. At our last meeting, Simone was so pleased with her results that we added psoas strengthener, which entails leg lifting with external rotation while lying supine, one leg at a time. Also added was the standing abductors strengthener, from utthanasana, this is done by lifting one straight leg at a time directly to the side.

In our training, Mukunda's shared Krishnamacharya's assertion that Kriya Yoga is the key to yoga therapy. From the **Yoga Sutras**:

Patanjali Yoga Darshana Pada II Sloka I. Tapa svadhyaya Isvara-pranidhanani kriya yoga. The practical means for attaining higher consciousness consist of three components: self discipline and purification, self-study, and devotion to the Lord.

My notes from Mukunda about this definition of Kriya Yoga state that tapas, svadyaya and isvarapranidha can be read as correlating to the three doshas. Specifically recommended for Vata derangement is svadyaya. I questioned Simone about her interest and past history studying spiritual texts. She had spent some time with the **Bagavad Gita**, but said she was drawn to Patanjali's **Yoga Darshana**. She had been given a copy of Nicolai Bachman's box set of **The Yoga Sutras: An Essential Guide to the Heart of Yoga Philosophy**. I suggested that she explore the box set, especially the CDs and the cards that

are printed with concepts. Because Simone expresses over-achiever tendencies and her language reveals that she often makes herself wrong, I was clear that this needed to be a venture born out of interest and what is naturally arising. The recommendation for pranayama was nadi shodana, two to three minutes with no kumbhaka. “By alternately breathing through each nostril, the mind naturally begins to feel the state of peace and one’s attention goes inward” States Mukunda in his book Ayurvedic Yoga Therapy

Chanting was an important recommendation, as Simone is a musician. Throughout the years Simone’s musical talents have languished due to performance anxiety. We discussed asmita and worked together to find some way to use her voice that felt “pure”. My suggestion was to keep it simple, chanting om and possibly including the bija mantra ham as a way to address stuck energy in the vishuddha chakra. A opening and closing ritual was made mandatory, with special emphasis on the closing ritual. I wanted Simone to nurture the ability to feel good about whatever energy she did devote to her sadhana, as opposed to her usual type A tendency, in which no amount of effort is ever enough.

In general, I kept it simple especially in our first meeting, as subject admits to a perfectionist nature, as well as sporadic, short-lived bursts of enthusiasum for new things.

e Results of Recommendations

In our second meeting, Simone no longer complained of pain in her neck, shoulder, wrist or hip. Her right knee pain had improved, but she was still aware of some discomfort. Simone announced that she hadn’t done her exercises. In

fact, it turned out that she had done the exercises, just not every day. I coached her about moderation, citing the **Bhagavad Gita** chapter 6:

yukttahara-viharasya

yukta-cestasya karmasu

yukta-svapnavabodhasya

yogo bhavati duhka-ha

Of one who is moderate in eating and recreation (such as walking, etc.), who is moderate in exertions and actions, of one who is moderate in sleep and wakefulness, yoga becomes the destroyer of pain.

Simone's re-test showed large improvements, and I was able to help her soften her uncomfortable feelings about "not doing the exercises right" or often enough.

Table 2

Joint Action	ROM	2/9/2011	2/9/2011	3/2/2011	3/2/2011	4/30/2011	4/30/2011
	Normal	Left	Right	Left	Right	left	Right
SI test		goes down	frozen				
SI re - test		less downward motion	some downward motion				
leg length		1/2" longer		1/4" longer		1/4" longer	
ankle dorsi flexion	20°	15°	17°	15°	28°	18°	19°
ankle plantar flexion	50°	45°	50°	50°			
ankle eversion	20°	20°	18°	18°	18°	20°	20°
ankle inversion	45°	60°	60°	55°	55°	55°	55°
knee flexion supine	150°	150°	137°		150°		
internal hip rotation supine	35°	32°	28°	35	40°	38°	40°
hip adduction	30 - 40°	32°	35°				
hip adduction IT band test	45°	40° felt in left SI	45°	45°			

hip abduction	45°	45°	45°				
leg length		1/2" longer		1/4" longer			
hip internal rotation prone	35°	38°	32°	35°	32°	40°	40°
wrist flexion	90°	90°	80°		90°		
neck extension	55°	48°		55°			
muscle testing assessment	1 - 5						
psoas isolation test		3	5	3	4	4	4
external hip rotators		5	5				
internal hip rotators		3	4	4	4		
hip abductors		5	5				
hip adductors		3	4	5	5		
alternate internal hip rotators		2	3	3	4		
shoulder adduction		3	5	3.5			
shoulder flexion		5	3		4		

April 30th, 2011

b Physical Assessment

See Table 2

c Summary of Findings

By our third meeting, Simone had more than average ROM in both the supine and prone internal hip rotation tests on the right side, and she achieved more than standard ROM on the right side. She now had standard ROM in the right ankle eversion test, with decreased complementary reduced range of the excess ankle inversion seen on both sides previously. The strength testing of both internal hip rotators and right shoulder flexion strength test were both improved. Her left psoas continued to show improved strength. While performing the psoas isolation test at the third meeting, Simone received a flash of illumination, and

with a little practice was able to “turn the muscles on” and build the neurological connection, resulting in improved strength and ROM.

e Results of Recommendations

At our last meeting, Simone expressed no knee discomfort and announced that her life “...has to support my divinity”. She had begun to study the **Yoga Sutras**, and stated that although she had far to go, she was happy to have begun. She had secured a regular part time job, which was a great relief to her, and had begun to look for a position teaching music to children again. She was enjoying more time in her seated meditation and more joie de vivre.

2 a Anterior Cruciate Ligament (ACL) Post Operative Surgery Pain

About 60% of people who have ACL surgery return to the full level of activity they had before their injury. Between 80% and 90% of people who have ACL surgery do report favourable results (i.e. reduced pain, good knee function and stability, and a return to normal levels of activity) and ACL repair is usually considered successful for an ACL that has torn away from the upper or lower leg bone (avulsion). However, 3 to 10% of people who have ACL surgery still have knee pain and instability and may need another surgery (revision ACL reconstruction), and revision ACL reconstruction is generally not as successful as the initial ACL reconstruction.

The Anterior Cruciate Ligament, or ACL, is one of four major knee ligaments, which include the Posterior Cruciate Ligament (PCL), Medial Cruciate Ligament

(MCL) and Lateral Cruciate Ligament (LCL). Of the four ligaments, the ACL is the most frequently injured. It is critical to knee stability, and people who injure their ACL often complain of symptoms of their knee giving out from under them. This is why many patients who sustain an ACL tear opt to have surgery. The ACL is comprised of tough, fibrous material and controls excessive motion by limiting joint mobility.

The ACL is the primary restraint to forward motion of the tibia. The femur sits on top of the tibia, and the knee joint allows movement at the junction of these bones. The ACL, in concert with the PCL, MCL, and LCL, stabilizes the knee and keeps it from dislocating. It also confers stability to other movements at the joint including the angulation and rotation at the knee joint by attaching to the femur on one end, and to the tibia on the other.

ACL reconstruction is typically performed several weeks after the injury. Studies show improved results when ACL reconstruction surgery is delayed several weeks from the time of injury, because the delay allows for reduced inflammation and irritation. Swelling decreases, inflammation subsides, and range of motion improves, which improves the post-operative function of the joint.

ACL reconstruction surgery is commonly, and erroneously, referred to as an "ACL repair." Unfortunately, a torn ACL cannot be repaired because it is not possible to reconnect torn ends of the ligament. The torn ligament must be entirely removed, and a new ACL must be reconstructed by grafting other healthy tissue from elsewhere in the body or from a donor. The correct terminology for the procedure is an ACL reconstruction, rather than an ACL repair.

It has been known for about a decade that women, especially women athletes, suffer a disproportionate share of ACL tears. There are several possible explanations for this high incidence among women. One possible connection is hormonal, since many women tear ACLs just before or after their menstrual periods. Anatomy also appears to play a part: researchers cite women's wider pelvises and smaller ligaments as possible risk factors. Studies have also shown women's muscles react differently from men's during the impact in landing. In particular, their hamstrings provide just a third of the shock absorption men's create.

Studies on ACL injury rates in women show that working with biomechanics can help prevent ACL injury. One of the recent encouraging studies on female injury rates occurred in Norway, where the ACL rate among women's team handball players is extremely high. (The team handball incidence is nearly one in five at the elite level.) Elite players who participated in a neuromuscular prevention program, including balance exercises simulating game-type moves and bumping, reduced their injury rate by a third. Important factors in these ACL prevention programs include:

Enhancing proprioception.

Improving balance, especially on a single leg.

Focusing on avoiding the vulnerable, knock-kneed or valgus position when landing.

Strengthening of the core muscles around the pelvis, including the hamstrings.

It's known that women tend to land with straighter legs than men, which decreases the amount of shock absorbed by the hamstrings, and passing the shock to the ACL.

b – Gross and Subtle Body Common Symptoms

Gross body

The bones of the knee, the femur and the tibia meet to form a hinge joint.

The joint is protected in front by the patella (kneecap). The knee joint is cushioned by articular cartilage that covers the ends of the tibia and femur, as well as the underside of the patella. The lateral meniscus and medial meniscus are pads of cartilage that further cushion the joint, acting as shock absorbers between the bones.

Ligaments help to stabilize the knee. The collateral ligaments run along the sides of the knee and limit sideways motion. The Anterior Cruciate Ligament, or ACL, connects the tibia to the femur at the center of the knee and limits rotation and forward motion of the tibia. (A damaged ACL is replaced in the aforementioned procedure known as an ACL Reconstruction.) The Posterior Cruciate Ligament, or PCL (located just behind the ACL) limits backward motion of the tibia. These ligaments work in concert with the muscles of the leg to manage the stress placed upon a knee in the act of walking, running or jumping.

Subtle body

To address the Annamaya Kosha, the recommendations include the JFS and regularity of lifestyle including mealtimes, which help the body assimilate prana from food. Repeated practice of the JFS leads one from the Annamaya Kosha to the Pranamaya Kosha. Simone was assigned both ujjayi breath and nadi shodana to help pacify her Vata and to regulate prana at the Pranamaya Kosha level. By studying The Yoga Sutras of Patanjali, Simone was present at the level of Manomaya Kosha. Simone continues to enjoy meditation, and using her musical talents in a purely devotional way with chant addresses Vijnanamaya Kosha, and ultimately Anandamaya Kosha.

Lawrence Michail reports on his Traditional Chinese Medicine website **Compassionate Dragon** that knees represent the quality of Pride. In spiritual practice it is suggested that one must go down before one can rise up, as Jesus did before John the Baptist, before taking up his own ministry. Pride or Ego keeps us from surrendering to the Will of God or the Universe. In practice, every time we move forward in Life or approach change, we approach the unknown. We may feel vulnerable or unsure. We may stand still, stiff-kneed, resisting change. It is interesting to note that according to TCM stiff, sore knees are a symptom of Kidney deficiency, whose emotion is Fear. Rather than admit our fear, we resist it until it overwhelms us. While knees represent Pride, and it is said that 'Pride goes before the fall', knees can also represent Humility, which is the wisdom to be yielding in the face of change. Louise Hay, in **You Can Heal Your Life**, also suggests that knees represent Pride and the Ego, and that knee problems may be said to indicate being stuck in the Ego, too proud to bend.

c - Related Challenges -- Lifestyle, Diet, Limitations on Activities

Simone works sporadically at local galleries. She notes that the lack of routine is not good for her, and expresses excitement at being held accountable in our work together. In the past, she has taught water aerobics and taught music to children. By our last meeting, Simone had secured a part time position at a biofeedback clinic. The steady money and the steady time commitment appear to be helping to stabilize her deranged Vata.

Simone asserts that she does not digest well. She is allergic to dairy and spent 15 years eating vegan and macrobiotic, she describes herself currently as mostly vegetarian. As Simone is 4 feet 10", I questioned her about her experience of ergonomics and she said that "nothing is the right size" for her size. Simone admits her house is uncomfortable for her since most everything is designed for someone taller than she is. She often stands to eat and sometimes eats in the car. She sleeps deeply for at least 8 hours and is a slow starter in the morning, citing joint stiffness.

Subject talked a great deal during the initial interview and this trend escalated as the interview, and successive meetings, went on.

3 - Ayurvedic Assessment and Ayurveda Based Yoga Recommendations for the Condition

Subject presents predominately Vata-Pitta qualities. Simone has dark curly hair, and she expresses anxious, circular thinking, excitability, excessive talking and dry skin. Mornings are hard for her to get started, because she is cold and stiff. At 4 feet 10 inches, she is shorter than average size. According to Robert Svoboda, most structural abnormalities, like deviated septum, scoliosis, bowlegs

or knock-knees, are also due to Vata. As Simone became more comfortable during the ROM testing, she revealed that she had been institutionalized at the age of 19 for drug use.

Dr Svoboda continues:

Vata Pitta people generally have the poor circulation and love of heat that characterize Vs, but their P nature sets definite limits to their ability to endure heat. The P in them makes them love to eat, but the V ensures that they will have trouble digesting large meals. Many of their characteristics show a combination of V and P; for example, they often have wavy hair, caused by a combination of V's curliness and P's straightness.

All too often, though, the influences of V and P alternate in the VP individual. When a VP is imbalanced, fear alternates with anger as a response to stress.

A healthy, balanced VP weds vs capacity for original thought and Ps expertise at application of theory. V and P have lightness and intensity as their common qualities. Proper direction of this intensity calls for harnessing the lightness for intensive self-development. Otherwise the V tendency toward addiction for pain control and the P predilection for addiction to amplified intensity will drag the VP individual deeper states of addiction than either V or P people can separately know. VP types most need stability. They need to be weighted down with the heaviness that characterizes Kapha, the least influential factor in their personality equation. The sweet taste is most important for them.

Because trust is a major issue for Simone, we discussed learning to trust her self, by using better follow through. We addressed both the need to complete any tasks she promised herself to finish, and also the skill of not setting herself up for failure by riding her Vata changeable interests and Pitta enthusiasm into a place of over-commitment. Some of Simone's homework was to use the connection to earth that she was cultivating by squatting in her sadhana, throughout the day.

Whenever she notices that she is disconnected, Simone opens the bottoms of her feet, micro bends the knees and brings the Mother to awareness. Simone was assigned both ujjayi breath and nadi shodana to help pacify her Vata. In general, we used routine and ritual to establish stability. This included sitting down to eat, and striving for regularity in daily routine. The Vata love of change can be indulged in ways other than intermittent meal times and portions.

4 – Common Body Reading

Knock-knees such as Simone’s are believed to be a major cause of ACL tears, especially in women. According to Source Athletic Training Services, Boston University, MA:

A smaller amount of ankle-dorsiflexion displacement during landing is associated with less knee-flexion displacement and greater ground reaction forces, and greater ground reaction forces are associated with greater knee-valgus displacement. Additionally, restricted dorsiflexion range of motion (ROM) is associated with greater knee-valgus displacement during landing and squatting tasks. Because large ground reaction forces and valgus displacement and limited knee-flexion displacement during landing are anterior cruciate ligament (ACL) injury risk factors, dorsiflexion ROM restrictions may be associated with a greater risk of ACL injury.

5 - Contraindicated Yoga practices and general activities to modify or eliminate

In the yoga forums web pages, Mukunda states,

“...mildly on rotations (again i (sic) disagree with twisting torso with legs planted as in anatomy book as it can stress rotators medial and lateral sides of the knee.

These motions are especially likely to aggravate the meniscus or ACL or PCL, the inner knee delicate structures.”

Simone was coached as to safe rotation of the knees. Also, I called her attention to her habit of knee hyperextension and coached her to practice with her knees micro bent. Also, eating while standing and eating in the car is rajasic and increases Vata imbalance. I discouraged her from these eating practices and encouraged her to focus on creating ritual in her daily life as well as in her yoga practice.

6 – General Recommendations for the Condition

a – Therapeutic/Free of Pain

ACL Reconstruction and Rehabilitation:

Rehabilitation after surgery for an ACL tear is a lengthy process. Return to activities may take months. Specific rehabilitation must focus on the individual.

The goals of the first days after ACL reconstruction are to minimize swelling and prevent discomfort. This can be accomplished with frequent icing, elevating the affected knee, and using crutches.

Some surgeons recommend the use of a brace after ACL surgery. This is controversial, and many surgeons choose not to use a brace at this time.

Another controversial subject is the use of a CPM, or motion machine, after surgery. Range of motion exercises can begin immediately after surgery. The

initial focus is to regain full extension of the knee. In general, flexion is much easier to regain than extension.

Physical therapy focuses on gait training, gentle strengthening, and aerobic work, especially on a stationary bicycle, as soon as possible after surgery to improve strength, motion and aerobic activity. As motion increases, emphasis is shifted to strengthening, specifically balance and proprioceptive exercises. Motion should be near normal and the swelling in the knee gone before initiating sports. After several months gentle activities can be started and patients can begin light jogging, cycling outdoors, and pool workouts. Side-to-side, pivoting sports, such as basketball, soccer and football, must be avoided. Patients must be conservative about use of the knee, because the knee may feel “normal”, but might still be vulnerable. After completing an abbreviated and in Simone’s words, “not very helpful” physical therapy, Simone focused on water aerobics to rebuild her knee.

Some surgeons may delay return to sports if the graft used to reconstruct the ACL came from a donor. Because these grafts are sterilized and frozen, there is a belief that they take longer to heal well inside the patient. There is also controversy about the use of braces during sports after ACL reconstruction. Studies have shown no benefit in preventing re-injury to the ACL. However, some athletes feel more comfortable in a brace, and there is no harm in wearing a sports brace.

6 – General Recommendations for the Condition

b - Stabilize Situation and Lifestyle Change Recommendations

In general, clients with post-operative ACL surgery pain need to find ways to continue to move prana and stay fit. Torsal twisting with straight legs is to be avoided. When these clients are in the throes of inflammation, they need to strengthen the leg flexors and extensors and keep the hips and ankles as supple as possible. Compensation is always an issue for a one sided injury. Many people with this condition are athletes and may encounter difficulty when needing to take time off of their sports to rest and recover. Education is the best option that therapists have. If the client can be made to use what is usually a strong body awareness and learn not to push past healthy limits (rajasic), then they are often able to use their ability to defer gratification, ultimately learning to honour their body mind field of awareness's need to rest. For Simone, this required repeated coaching to help her move past her over achiever tendencies. Ultimately, she had success redirecting her motivation, and began to listen to her internal clues, instead of allowing herself to be run from some externalized idea.

c – Maintenance and Long Term Considerations.

These skills should be extended into times when the client is free of pain. The ability to both listen and honour their inner needs can continue to be cultivated even when the client is pain free.

7 – Questions and Answers from www.yogaforums.com

Knees

I took your SYT course at Kripalu a couple of weeks ago. I am the one who was blowing my nose the whole time. The one from Puerto Rico. I am writing first, to say thank you again. Your teaching left quite an imprint that continues to deepen

in my sadhana and in my life each day. It feels beautiful. I look forward to doing the 2 year training with you.

The second thing has to do with my knee. At the course you only had time to check it out briefly. You told me to strengthen all my leg muscles. You said bridge reps would be helpful. I think, however, my knee is worse than I knew. I actually think I might have injured the meniscus. When I am standing naturally, with equal weight on both feet, my left knee is comfortably straight while my right knee is slightly bent. I had been feeling resistance to that knee straightening for a while. Now it requires me to really engage my quads to get the knee straight and even then it feels kind of jammed. It clicks with each step I take, always. The clicking point is at about a 5 - 10 degree flexion. And there is a slight gravelly sound on extension. And, there is quite a bit of soreness near the connection to the fibula. Bummer.

I am really hoping that it isn't something that is going to require surgery. And, at the moment I have no health insurance. So, I have been spending more time with all the stuff in the JFS that strengthens the legs. I have been doing slow flowing reps of warrior poses I and II as well as bridge reps focusing on muscular contraction rather than momentum. And, I found a sequence for knee strengthening in Anatomy of Hatha Yoga that I have been practicing as well. Basically it consists of standing with my legs wide apart and strongly engaged while I turn my trunk right and then left and then bend forward and back on each side turn a million times. Any thoughts you might have about this would be hugely appreciated. I know you are busy and get lots of inquiries from loads of students. So, I'll be patient.

Namaste,

knees

I would recommend that you go to my archive site - www.yogaforums.com and do search about knee conditions there you will find my answers to many similar complaints. Also recommend taking glucosamine chondroitin supplements which seem most helpful for connective tissue injury. I cannot say what is injury without seeing you but suggest you do vata balancing and kapha increasing practices. First is JFS done with rhythmic breathing -- key is not too many times 6-10 is enough to get the sense of prana flowing into the joint tissue. Definitely the million times recommended in Anatomy of H. Yoga is likely to aggravate by increasing pitta. Do not do much let it heal. In second phase of healing once swelling, tenderness to touch is passed then increase kapha by doing JFS as it says in my book for strength. Think of toning all directions of motion - adduction, abduction, flexion, extension, mildly on rotations (again i disagree with twisting torso with legs planted as in anatomy book as it can stress rotators medial and lateral sides of the knee. These motions are especially likely to aggravate the meniscus or ACL or PCL, the inner knee delicate structures.

To increase kapha safely you should feel the specific muscles you are toning and only do one muscle per asana as in the JFS Strengthening series; holding poses only 6-10 breaths or more specifically as long as you can focus on one muscle awareness. So in bridge tone hamstrings. In Locust tone gluteals. In Virabhadrasana I tone adductors; in Virabhadrasana II tone abductors, like that then you will be safely building tone and power to immune system. Be cautious if you suspect meniscus injury. Do not be aggressive, keep sattvic attitude, not rajasic attitude i am going to heal no matter what (that creates trouble). blessings. mukunda

8 - References and websites

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9 – Appendix

Further Recommendations

At our initial meeting, I asked Simone to perform a deep squat on the balls of the feet, with a belt around the knees for up to 2 minutes, while actively lifting the toes to lengthen gastrocnemius and strengthen anterior tibialis, addressing the limited range of dorsi flexion.



10 – Biography

Elizabeth Cooper Rajeshwari Seay is a registered yoga instructor with the Yoga Alliance. She has completed the 700 hour Structural Yoga Therapy certification with Mukunda Stiles. Cooper has studied with great teachers such as Darren Rhodes, Donna Farhi, Ana Forrest, Amy Ippolitti, Christina Sell, Doug Swenson, Ed Marks, Mary Obendorfer, George Purvis, Bikram Chodury, Kofi Busia, and Amy DeFilippi, and Mukunda Stiles.

After completing a teacher training in Bhava yoga with Peter Rizzo, Cooper began her current path and passion, teaching vinyasa in the Krishnamacharya lineage. Cooper currently owns and operates the Antahsara Yoga Shala located in Clarkesville GA. Antahsara Yoga Shala is a part of A Garden For Wellness, a wellness center offering clinical hypnosis, acupuncture, massage, yoga, and chiropractic care.

As counterpoint to her hatha yoga, Cooper practices vipassana meditation as taught by SN Goenka. As a teacher, Cooper strives to integrate the tapas of a committed practice with the santosha of a quiet mind. She is sensitive to the perils of strong physical work in a culture that is body obsessed, and believes that only through the eight-limbed path can we become free from internal friction.

