

Low Back Pain

Understanding and Healing Intermittent Back Pain With Structural Yoga Therapy

A research paper

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1 - CASE STUDY #1- Sally

A) INITIAL INTAKE

Sally has been a Yoga student for about 2 years with me. She is in her early 50's, medium build with a powerful attitude. She puts her heart and true action into all that she does. She has a passion for accruing knowledge of all sorts. She is quite active with her dog and hobbies and travels a great deal with her husband. She has been married for about 9 years and lives in a beautiful house on a large parcel of

land in Bucks County, PA about 8 months out of the year. The rest of the time she lives in a cottage in a small town in Northern England. She incurred an injury in January 2005 in asana class on left side, near L4, L5. There was pain in lateral flexion and when she felt stressed. Sally has worked as a massage therapist and felt certain that the pain was located in her Quadratus Lumborum attachment by the iliac crest. She frequently has pain on the right side of her spine unrelated to the injury; the pain that resulted from the injury was on the left side.

Sally had car accident in 1982 where she was hit in the driver's side door. She suffered from Whiplash and was hospitalized for two weeks. During her rehabilitation work for the whiplash in the cervical spine, her low back began to bother her. 1-½ years later she was diagnosed with a herniated disk between L4 and L5. She spent 2 weeks receiving intervertebral injections of litacane, which made her pain worse. Sally was advised to have a Laminectomy¹ at which time the herniated disk was removed. Sally went to physical therapy for about 2 weeks after her surgery, but found it caused her more pain so she stopped going. It was at this time she began to work with massage therapists to help her rehabilitate her back and work with her scar tissue from the surgery. It was shortly after this experience that she decided to train to be massage therapist. Sally expressed to me that she felt that the pain she has always experienced on a low level in her back was a vestige from her accident.

Sally generally takes 2 classes per week (or practices on her own when traveling) and supplements that with two days spent with a personal trainer working with weights and doing mat work. She also works 4 days a week on a treadmill, stepper and/or rower in her home gym. She doesn't practice Massage Therapy professionally any longer. She immerses herself in her hobbies now, which are Ceramics (not on a wheel), gardening and being with her new puppy.

B) PHYSICAL ASSESSMENT: 5/18/05

Body reading:

The right side of her pelvis dipped down during Sacroiliac Joint Exam², left side stayed still. Her right leg was slightly longer than left. In standing there seems to be stiffness and holding in the low back and neck.

Table 1a

Range Of Motion	5/18/05	5/18/05
	Left Side	Right Side
Supine Internal Rotation	43	54
Supine External Rotation	60	62
Prone Internal rotation	35	40

¹ For more information on Laminectomy see Appendix

² For Sacroiliac Joint Exam details see Appendix

Prone External rotation	55	60
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Table 1b

Muscle Testing	5/18/05 Left Side	5/18/05 Right Side	10/9/05 Left side	10/9/05 Right side	10/14/05 Left Side	10/14/05 Right Side
Side lying Internal rotation	3.5	2	3	2.5	3.8	3.8
Prone Internal rotation	3	2	2	2	4	4
Hamstrings	4.5	3.5	3	4	4	4
Hip extension	4	4.5	4	4	4	4

C) SUMMARY OF FINDINGS

Table 1c

Weak muscles:	Muscles to be released:
Right hamstring	Right side internal rotators
Right internal rotators	Right side external rotators
Left internal rotators	

Both right internal and external rotation showed higher ROM than left but were weaker than left side in both supine and prone tests. The assumption I made was that these muscle groups were tight, pulling the leg into greater ROM. They were weak as well and had no stamina.

D) RECOMMENDATIONS FROM INITIAL SESSION

I told Sally to practice the Sacroiliac Stabilizing Series (see section 6 for description) before any physical activity. In addition I recommended movement #5 from the Joint Freeing series (internal and external hip rotation). Muscle tests showed both legs were weak on internal rotation with right side more so. Her perception of strength of

internal versus external rotators during the muscle tests were exactly opposite mine. Our assessment of hamstring strength differed as well. She was surprised at the difference in interpretation, as was I.

Then I gave her cat and dog with emphasis on engaging abdominals in the cat portion. She liked that as it took sensation out of her low back in the painful area. Strengthening the superficial muscles (and eventually the deeper layers) and focusing on Uddiyana and mula bandha during the cat tilt will help her eventually do crow which is a long-term goal of hers.

We also added Sunbird with right toes turned in, then hamstring curls and pulses up with knee bent, belly in. When she tried the same on her stomach she reacted on left side injury spot. (The pelvis fixed in this position, adding to my suspicion that the left side pain was from the right side weakness). I told her to keep her tailbone turned under during all leg lifts in sunbird so as to increase the engagement of the hip extensors. Since she uses weights I suggested she work with her trainer to target her right buttocks and hamstrings in strengthening exercises.

E) SUMMARY OF RECOMMENDATIONS

I met with Sally one week after the initial exam. She worked diligently with what we did and found the pain in her back to be greatly reduced. The only flare up she had was when she was in a car and very stressed out from the events of the day.

Sally left the country for the summer and when she returned I did a follow up session taking new measurements. While she was away, she mixed her therapeutic practice with a Vinyasa flow sequence we worked out that incorporated strengthening moves for her hip extensors.

10/9/05

I met with Sally after her return from her 3 months overseas. During her trip she had a wonderful experience doing the practices I sent her at home by herself. She alternated the therapeutic work with the more rigorous Vinyasa form we came up with as she had planned. She also used some Yoga videos that she had brought with her. She found that she was able to diverge from the recorded sessions to do what she felt she needed to do in the moment. This was a big step for her as she was unable to consider the creation of a self-practice before she left. She now feels confident in her options and is able to listen to what her body needs. For example she has a slight shoulder injury from overdoing work at home. Because she is now attuned to what she should and should not be doing with her shoulder she is able to modify her practice to keep it safe.

The pain in her back slowly diffused over the course of the summer. She is happy to report there is no pain now for about 1 month and her back now feels the best it has in over 1-½ years. She is sure that the strengthening work in her hip extensors is the reason behind this, and she also feels that something “let go” in her Quadratus Lumborum that was holding on for some time.

In retesting her muscle strength in the reported weak areas, her right hip extensors were a little stronger than her left ones even though she was working symmetrically during the summer. Her right side internal rotation still tested weak.

We reviewed the JFS movement #5 that she was working on over the summer. She felt like this move was easy to do on the right side which tested weak than the left and didn't want to double the reps as I suggested because she felt like it was productive on the left side to loosen up the tight spots but she was not feeling much on the right side. To emphasize the strengthening aspects of the movement I had her engage thru the right leg, flex the foot and press out through the right heel. This brought sensation to the weak area and she was satisfied with that. We then looked at the left. When she tried the same technique on the left side it took all of the sensation out of the movement, so we left it "droopy", no engagement at all on the left side. She was to just go thru the movements. This felt to her like it was working deep in the joint where she wanted to be, also in the groin area. So we left it like that, working with engagement on the right side and softly on the left.

Then I took her to standing where we did "vamp" pose³. This is JFS movement 8. When standing, left hip presses out to the left side while the right knee is bent and right side of pelvis dips down. This creates a nice opening in the left hip. This was good movement for her, she liked it a lot. She felt this too was getting deep into the left hip. She said she would practice this in front of a mirror to make sure her hips stay neutral side to side as she presses the hips out. Then to work on the right internal rotators I showed her the following leg lift⁴: While in Vamp, hips swayed to the left, right knee bent, lift the right leg up to the side in hip abduction, keeping in line with the body. At first she was feeling this in the middle of the IT band (mid way down the thigh). I had her turn her femur more internally pointing the kneecap down, and heel lifted higher. This brought the sensation of the movement up higher into the TFL and Gluteus Medius. She was to practice this set of movements twice as much on the right as the left. The sequence- sway hips to the left, exhale. Inhale, lift right knee up, emphasize the internal rotation, and exhale down. Switch hips to the other side. We also worked with her practicing the JFS movement #5 while standing (internal and external rotation of femur while adducting and abduction respectively. Knee remains bent and shin is softly hanging from knee). She felt she was really working the strengthening aspect of those movements.

Sally's face lit up after we did this as she came to the conclusion that she needed to strengthen her right hip and loosen her left hip. She was very excited about her realization as it made perfect sense to her, and it was a bone deep understanding that was revealed to her in an instant.

10/14/05

Sally and I met briefly to check out the results of her working one week with the new poses. The muscle testing on internal rotation was even between the left and the right leg. She loved the new exercises and said that the left hip was really beginning to open up nicely. And she felt more stability in the right hip. Being a massage therapist she was especially pleased with the vamp pose as she felt it gave her the ability to go deep into her psoas and QL like no other thing she had tried, whether with her body or on someone else's. As Sally is also a potter, she has really begun to notice her working positions as well as those positions of people around her.

One week after my last meeting with Sally she came to tell me that she felt a twinge in her back, as if the pain she had previous to working with me was going to return. She said she broke the cycle by immediately going into the SI freeing series. After a few minutes she said she felt her psoas pop and go "back into place". She was

³ For image of pose see appendix

⁴ For image of pose see appendix

pleased to know she has a tool now for breaking the cycle, and the awareness of how and when to use it.

Sally, as mentioned before, is very aware of her body and interested in how it works. The work she did rested primarily in the annamayakosha as we wanted to strengthen what was weak. She frequently shifted to other koshas. She began to understand the kinesiology that we worked with as she felt it in her body and aligned it with what she already knew about anatomy. She moved (annamayakosha), she felt (pranamayakosha), she understood (manomayakosha), and her face radiated knowledge (vijñanamayakosha). Before class begins, Sally now reaches for the Yoga Sutras book she keeps in her mat bag.

1 - CASE STUDY #2 Jenna

A) INITIAL INTAKE: 6/15/05

Jenna is a 34-year-old woman, 5 feet tall and weighs 130 pounds. She started practicing Yoga with me about 1-½ years ago, and last February enrolled in the teacher-training program. I began working with her because she was complaining of severe occasional low back pain and pain in her left foot at the heel, as well as occasional knee pain. She attributed much of her knee and foot pain to wearing high-heeled shoes and running up and down steps frequently at her last job. The apartment she was living in at the time had many stairs, as it is a three level loft. She would often have a flare up of back pain after attending several classes or participating in other physical activities, like biking and hiking. She saw me initially to review basic asanas because she felt she was doing them incorrectly. She was also experiencing pain in her foot and back in many of the basic Yoga asanas. Jenna is a very eager student who is searching for connection to her spirituality. She displays symptoms of vata imbalance such as confusion, forgetfulness, lack of clarity in communication, misunderstandings, fear and anxiety, overly busy schedule, inability to focus, and roving pain. She also has extremely little body awareness. Jenna was diagnosed with scoliosis as a young child. In examining her I found there to be no lateral curve of the spine, rather there is a pronounced lordosis. Jenna also has difficulty in holding her personal boundaries. While there is a general lack of awareness for certain basic things, she seems to have a keen sensitivity to peoples' energies, especially if she perceives them to be negative.

B) PHYSICAL ASSESSMENT

Body Reading-

Jenna has a pronounced lordosis which is obvious when she stands and in most asanas. Her sacroiliac joint moved down on both sides during the Sacroiliac Joint Exam. Her right hand hangs further forward than her left as she stands in tadasana.

Both hands have a tendency to turn back, especially in Savasana. Her inner thighs bow out, which translates down into her feet, she lifts her big toe joints often and puts lots of weight on the outer side of her foot. This shows up in the measurements for her feet (see below) and creates instability with her connection to the ground. She fidgets often, trying to find a comfortable way to stand and sit.

Jenna has often said to me that she feels all of her physical problems stem from her left heel. She experiences a pain radiating from the heel into her ankle and up the back of her leg.

Table 2a

Range of Motion 6/15/05	Left	Right	
Dorsiflexion	0	10	
Eversion	14	10	
Inversion	83	80	
Supine external hip rotation	75	64	
Supine internal hip rotation	40	20*	*Pain in left low back
Prone external hip rotation	94	80	*Caused reaction in left hip on the side
Internal hip rotation	36	34	

Muscle Tests

Almost all of the muscle tests caused a painful reaction. Table 2b is the tests that did not cause pain

Table 2b

Side lying position	Left	Right
External rotators	4	4
Internal rotators	4	4

Abductors Above knee	3	2.5
Abductors Below knee	4	4
Abductors	4	4

C) SUMMARY OF FINDINGS

Table 2c

Weak muscles	Muscles to be released	Muscles to be Stretched
Internal Rotators	External Rotators	Gastrocnemius
Adductors	Iliotibial Band	Soleus
Peroneus Longus	Tibialis Posterior	Iliotibial Band
Peroneus Brevis	Gastrocnemius	
Tibialis Anterior	Soleus	

D) RECOMMENDATIONS FROM INITIAL SESSION

Sacroiliac Stabilizing Series was clearly causing Jenna pain in our first meeting. Instead I gave her a modification where she was to lie on her stomach with knees bent and alternately move legs into and out of rotation like windshield wipers⁵. Also recommended was the entire JFS series with these modifications:

Internal and external rotation in wide-legged sitting position to be done with knees comfortably bent. Focus was to be on the sensations she was feeling in the TFL and IT band.

Sunbird pose: extended one leg out and keep the top of the foot pressing into the floor without lifting it up. Tilt pelvis upward, tail bone under. This was recommended because lifting the leg caused too much shifting of the torso to the opposite side and pain in the back. Jenna felt this to be a good and safe engagement of hip extensors.

Hips side to side: Done with a roll of socks or something similar between the thighs to encourage adduction during the movements and bring awareness to thigh position.

⁵ For image of pose see appendix

Dorsiflexion and inversion and eversion to be done throughout the day, (during computer work or viewing TV for example) in addition to doing it during JFS.

Savasana with hands in yoni mudra under sacrum. This caused a dispersion of sensation that collected in the sacral area and Jenna enjoyed the release in the low back.

Also I recommended Jenna refrain from Shoulder stand, a pose that caused spasming in her back during class, and more rigorous classes in general. Instead I suggested she come to the Yoga as Therapy classes or level 1 class.

7/20/05

We repeated some of the MT but Jenna still displayed discomfort and pain in all tests, from both the muscles themselves and my pressure on her skin.

I repeated some ROM measurements (not charted), but just as the measurements taken at the initial session, the results kept fluctuation during testing which showed a strong presence of vata. I didn't feel any further measurements would show anything significant.

I checked with the client to see how practice was going. She had not been doing entire the JFS at home, only took parts out, and had been doing the seated SI Stabilization series which she said no longer caused pain. She also was doing the windshield wiper motion in addition to the seated SI Stabilization series. Lastly she complained about too much pressure in her hands during the yoni mudra practice when hands were placed under sacrum, so we modified it by taking yoni mudra to belly and out from under the back when needed and placing a small, low folded blanket under the sacrum to allow the low back to relax down.

I emphasized that she needed to do the entire JFS everyday, and finish in Savasana with Yoni Mudra. She had told me she was using frankincense oil during her evening prayer; I recommended she use lavender instead as I felt the frankincense may be accelerating her awareness faster than she was ready for.

Jenna questioned the newfound pains and sensations in her body from starting this type of mindful practice. She felt she was doing too much for other people because she was unable to say no to them. It was her desire to just do for herself and read her books. She told me she often collapses from exhaustion at the end of the day because she is doing so much work. She has also talked about how she wants to find a way to protect herself from negative energies from other people.

I asked her to put aside at least 10 minutes each evening for herself before going to bed, whether for meditation or something else, no matter what. I also asked her to be very mindful of how she feels in asanas, and to begin to feel her edges, so as not to work with pain as she is so accustomed to doing. We also spoke about whether she was ready to continue forward with this kind of practice as her awareness would continue to increase. Along with that there will perhaps be an increase of her perception of pain in her body and an increase in her emotionality, which had already been altered by her practice.

E) SUMMARY OF RECOMMENDATIONS (2ND ASSESSMENT).

10/1/05

Jenna moved into a new apartment close to her old one. This apartment is mostly on one level, with only her altar/meditation space being high off the ground. (This is discussed later). After the physical and emotional stress of the move was completed, (2 weeks later) she said she felt tremendously better. She believes it is primarily because she is not going up and down stairs all the time and because she was able to move away from a neighbor/co-worker that was causing her much distress. I only retested her sacrum because the other measurements I had made on her previously changed suddenly and frequently during the assessment and I was not able to get good muscle test results because she was in pain. Her sacrum showed that after a few repetitions her left side moved up slightly and her right side down.

The pain in her foot and knees is gone, and she said her back was fine. However, when she demonstrated the resting pose she now took in classes she said it helped to dissipate the ball of pain she has in her sacrum. The more I talked to Jenna about her practice and her body, the more it was clear that she was still in pain. I assume that there is a constant low-level pain in her sacrum that she does not recognize as abnormal.

We spoke of what her continued self-practice consisted of. It was hard to get a straightforward answer, but since it is important to press for details when working with vata I continued to question her. However, she slid into a circular pattern of speaking that was not increasing her awareness, rather it served to spiral both of us deeper into confusion. She said she was doing practice "every other day or so" that consisted of parts of the Joint Freeing Series, some mantra (she has been working with the Maha Mrytunjaya mantra⁶ for about 4 months) and some yoni mudra. She continued to take classes 2-3 times a week at the Yoga studio. For a while, she was able to modify poses in class that would have aggravated her back before. She was taking more rests during classes and moved into the "windshield wiper" series that helps her to ease out her back. However, after about 5 months, she was back to ignoring the signals from her body.

Jenna mentioned she switched from frankincense oil to a calming blend and felt it was easier for her to sit for meditation.

We spoke again of her making a commitment to doing a short, regular practice every day. This rhythm of practice is a good way to ease vata. One obstacle she had in doing this is it is difficult for her to get to where she has set up her prayer spot. It is in a loft that she needs benches in front of the stairs to get to her altar. Also in front of the first bench that leads upstairs she has placed all of the boxes and bags she had not unpacked and organized from the move. Clearly this was not a supportive environment to sustaining a practice. I suggested she forego the hard-to-reach sanctuary and instead take 10 minutes before going to sleep and do her practice right in her bed. We agreed she would do some mantra, some quiet meditation practice and end with Yoni Mudra, every night without fail. If she had available time she could do the JFS. I asked her to email me every day letting me know how it was going.

10/20/05

Jenna did not keep up a communication with me regarding her practice and I did not pursue it. I checked in with her on the 19th to see how her practice had been going.

⁶ See appendix for mantra

She still had not made a commitment to a regular time to practice, due to her work schedule. She again indicated that her body was feeling fine, but then later said she was experiencing soreness in her lower back in the mornings and evenings. She was still using the yoni mudra practice at both times to help dissipate this soreness, in the morning on top of her belly, in the evening below her sacrum. She also continued to do the modified sunbird and SI freeing series, but no JFS. She and I worked together in a class where I assisted her in all poses on the 18th, and after this session she felt again that all of her imbalances stemmed from her foot and ankle issues. Jenna assured me that when November came she would be able to commit herself to her practice.

One thing that I have noted about Jenna from the teacher-training program is that she is much better able to understand asanas and alignment and positions of the body when she is watching and/or touching someone else's body. Her ability to verbally cue an asana improves when she has her hands on a student. It remains to be seen if just assisting and observing other students the path of going in towards herself can be furthered. Currently, Jenna opts to assist in classes more than she takes classes. A colleague of mine who is very intuitive and adept at reading energy fields mentioned to me that he felt Jenna is "terrified to *be* in her body". Perhaps by observing and being in asana with someone else, she will gain the confidence and courage to work with her own body. She has a sincere desire to teach Yoga and be involved in a spiritual lifestyle and that desire may draw her into a committed, regular sadhana. As she showed during the 5 months we worked together, she is not able at this time to commit to a steady practice, and this translated into the results of my findings. Her temporary relief from her acute back pain is just that, temporary, and mostly due to the change in her living conditions, not due to any changes she was able to make in herself.

There was one shift in Jenna's practice that should be noted. For the year or so that she has taken classes with me she was never able to rest in Savasana with her hands relaxed palms facing up. Rather she mashed her hands, palms down, onto the floor and seemed to be "white knuckling" through the relaxation portion of the class. I always would go and gently open her hands upwards which moved her into a more perceptible state of comfort and ease. Recently, within a few days of this writing I have noticed she has started to relax in corpse with her palms up without any physical prompting from me. We spoke about this recently as I felt it was worth mentioning to her. She was unaware of this shift. As we explored it further, it seemed that she has gone from begging her mind to be quiet during Savasana to experiencing emotions during the pose (which she doesn't squelch as vehemently anymore) or moments of peaceful stillness.

Jenna was unable to work in the annamayakosha. She remains very unconnected to her body. Asanas are currently not the vehicle for a transformation in her. Vata loves to hide and indeed our work together thus far has not served to flush it out. Jenna began practicing Zen Meditation with a gentleman named Sunyata, who teaches at the studio. She is very fond of him and his methods and told me he has revealed a whole new side of meditation to her that makes it accessible. "The practical means for attaining higher consciousness consists of three components: self-discipline and purification, self-study and devotion to the Lord." (*Mukunda Stiles, Yoga Sutras of Patanjali, page 16, chapter 2, verse 1*) One must strengthen the mind before self-study can begin. Following this sutra, if Jenna is able to enter stability through meditation, she can potentially move into a deeper understanding of her physical and subtle body structures.

1 - CASE STUDY #3 Ziva

A) INITIAL INTAKE: 3/16/05

Ziva is a female, 54 years old, around 5' 3" and weighs 130 pounds. She is a massage therapist specializing in Neuromuscular Therapy. She is in her second marriage to a hard-working entrepreneur and had two older, out of the house daughters that she is very devoted to. She recently became a grandmother for the first time. She is very youthful, low key, and unassuming. She practices Yoga in a class setting 1-3 times per week. At home she uses a treadmill, stationary bike, and does some aerobic workouts with videotapes. She bikes outside in nice weather and likes to walk a lot with her husband. She has had a few dramatic injuries from relatively safe movements. In the mid 90's she was reaching for a towel and sneezed, putting her upper back out. She ended up in the Emergency Room and then in bed for 3 days, unable to work for 5 days. She suffered mild spasms for about 1 month. She mentioned this was during a stressful time in her life. Her last injury was in November of 2004. She fell up a stair and her low back seized on left side. She couldn't extend or flex her pelvis. Sitting was ok for her, but she would need to wait 30 seconds or so before she could walk after getting up. She mentioned that she had trouble sleeping on her left side as her hip bothered her, and this was before the back injury.

B) PHYSICAL ASSESSMENT

Body Reading:

Ziva has a very solid build. She holds a lot in her upper body and shoulders. There is a distinct straightness across her shoulders and not a lot of independent movement between her neck and shoulders. She frequently mentions tight shoulders as being a problem for her. Ziva's pelvis appears to be anteriorly tilted, although there is not a pronounced lumbar curve. Her overall flexibility in asana class is good, but her body is not fluid.

Table 3a

Range of motion	3/05 Left	3/05 Right	10/05 Left	10/05 Right
Supine External Hip Rotation	58	55	52	42
Supine Internal Hip Rotation	42	38	43	40
Prone External Hip Rotation	55	60	49	60
Prone Internal Hip Rotation	35	34	38	26

Table 3b

Muscle Tests	3/05 Left	3/05 Right	1/06 Left	1/06 Right
Prone External Hip rotation	4	4.5	5	4.5
Abductors Above knee	3.5	painful due to earlier injury.	5	4.5
Abductors Below knee	3.5	painful due to earlier injury	5	4

C) SUMMARY OF FINDINGS

Ziva's ROM shows tightness in the right hip just about all around. She is very strong overall, with the muscle test showing the right side a little stronger than the left.

D) RECOMMENDATIONS FROM INITIAL SESSION

Rather than giving Ziva more to do as far as additional asanas or exercises, I recommended she work with the Sacroiliac Stabilizing Series (see section 6 for details) before doing any other type of physical work, including giving massages. I also recommended she add Savasana on to her at-home practices and work with Yoni Mudra. My feeling was that she needed to unwind and relax rather than strengthen or stretch any one thing.

E) SUMMARY OF RECOMMENDATIONS

I kept contact with Ziva in the next few weeks and I met with her formally after two months. She said the SI series was good as it felt like it gave her space in her hips, and she was adding relaxation time in to her routines. She did not have a reoccurrence of back pain during this time.

5/17/05

When I saw Ziva in May we worked at her studio. I checked her SI. Both sides were stuck with no movement discernable. In retrospect, I should have not done the following release techniques on her where she works. It occurred to me she was unable to unwind in her studio.

I had her do low lunge with right foot forward and out to the side. I had her move slow and focus on her exhales. She felt a stretch up the left side quads. She also felt a stretch on right adductors, although the stretch in the quads was giving her the greatest joyful sensation.

I had her lay on stomach and did a femur release with her knee propped up my leg, knee bent. I pressed my forearm into her femur below buttocks and drew heel back towards buttocks on exhale. She loved this. During the work she talked about her clients. She seemed a bit uncomfortable with the silence and absorbing the work we were doing.

Then I did the piriformis/deep six release⁷. She felt very tender at first when I put pressure on femur head, but it let go after a while and she wanted more pressure. I felt a few releases. She continued to talk again after relaxing into the release technique occasionally saying it felt really good.

After those two releases I had her walk around, she said she felt more spacious in her hips.

She just had 10 Rolfing sessions; I asked about her psoas, she said the work was difficult on the left side and that sometimes the left side psoas just plain old ached. I did a psoas release on her while she lay face up. She wasn't able to hold it too long and commented that this was a real heat builder. Her leg length previous to release was right about ¼ "longer than left, after the release her leg lengths evened out. She walked around after the release and liked the spaciousness she was feeling.

I told her to continue the SI mobilization, and the low lunges slowly with focus on release rather than stretch to keep her pitta down. I told her if she could continue to work on releasing her psoas on her own by pulsing her leg up and down with her toes turned out and leg about 18" out from her centerline.

10/9/05

Ziva said her back was been fine, but her left quadriceps was bothering her. She mentioned that after all the things she has been able to work out of her body; this one seemed to be holding on. She also was still feeling a general tightness in the hips all around. We talked about her Yoga and home practice. She told me a few weeks prior her husband was out of town and she was able to come to 4 Yoga classes and only did her home practice with the aerobics one day, and she felt really great. She said she was trying to find a good balance between her Yoga practice and her cardio. She wanted to leave in the cardio training because she feels good from it and since she had developed a taste for a slow Yoga practice she was no longer getting the cardio she enjoyed from Yoga. She shared with me that she feels she needs to stay in shape for her work. If she were to see 4 clients a day she knows that would be physically demanding on her. She wants to be conditioned to be able to handle a volume of 4 clients, 5 days a week. We talked about it more and I understood that she has never had that volume, and while she would like to move her practice up to that volume, she fears she would not physically be up to it. We did not talk about that further because there seemed to be a bit of confusion as to what she needed/wanted and what was appropriate for her. As with so many of us, we complain when we are too busy, and worry when we are not. I didn't feel she was interested in pursuing this at that time.

She has continued to do the SI freeing series. When I checked her sacrum at noon that day it was moving down on both sides. This was after a practice in the morning at home, starting with the SI series as she always does. After a few repetitions, together maybe about 15 each side, her sacrum was mobile again. We fine-tuned it by making sure she used her hand to roll the femur (which she said made it more

⁷ See appendix for release technique

intense, but it was good for her). I asked her how long she does it for and she said 15 times each side. I asked her to throw out any numbers and try to discern when it was time to end. She should look for a sensation of release, regardless of how small, before ending the series on that side. I also told her not to worry about making one side equal to the other. The other practice she had continued every day is the low lunge. As I watched her go through the lunges I saw she was forcing her hips down a bit and she was moving very mechanically. To change this around we put her hands on blocks and slowed the movements down. I gave her the suggestion that she had a string attached to her sacrum, and it was what lifted her hips up on the inhale, and as she exhaled the string unwound and lowered her hips to the ground. I had her exhale through her mouth and encouraged her to let the exhales gradually get longer and deeper. This immediately changed her movements and her demeanor. She felt a big difference between working this way and how she had been working before. During the exhale she felt moved to roll toward the outside of her back thigh. I told her this was one of my favorite movements, and she could move toward that position whenever she was ready as long as she remembered to turn out her toes on the front foot out as she descended.

Lastly we talked about the final practice she was given which was Yoni Mudra during Savasana. There was a little frustration with this for her as her thumbs did not meet comfortably and she knew they should. I told her to keep some folded blankets by her and prop her elbows up on them. I asked her if she was feeling anything from the practice and at first she said no, but then shared that sometimes it felt like there was energy coming in to her, and sometimes there was energy going out, perpendicular to her body. I told her to use standard Savasana pose, hands and feet out far, when it feels like she needs to release something, and feet closer together and hands in yoni mudra when it feels like she is being given something, or taking in energy.

10/20/05

I spoke with Ziva to see how the new recommendations were panning out for her. She said she had been doing the low lunges and SI freeing series at home without counting the reps, just feeling for when she should end. She said she would tend to do the exercises longer, and as a result she felt that there was a definite shift in her body, and could really feel that the asanas were making a difference. As for the practice of discerning whether to move into yoni mudra or a wide, open stance posture during Savasana, she said she had had a stressful week and found herself more in the wide-open Savasana. She found there to be a lot of freedom in being able to notice and choose to not do yoni mudra and just let everything go and release. Ziva pretty much came to the same understanding that Sally did in that she has been able to feel the beginnings of problems in her back and was able to choose to move her body in a way that would guide her away from the pain and towards a release of tension that was building up. She also found the way to break the cycle, and has chosen to move in that direction many times.

My work with Ziva stayed primarily on the annamayakosha. She was content to be there.

Summary and comparison of the three case studies:

Ziva and Sally were able to recognize the pathway to pain, and chose to halt the progression. Being massage therapists, they both have a good working knowledge of anatomy, and they also were very motivated to spend even more time than they already did working with their bodies. They also both are married to men who

make/have enough money and so they do not have to worry about financial support in the near future. They have the luxury of spending time in practice. Jenna was not able to sustain a regular practice as recommended to balance her vata. She supports herself and speaks of her budget often. At a young age, she has already been married and divorced, and currently lives with a recovered drug addict. She holds onto the fear that he could go back to drugs at any time. (At this final edit, her boyfriend did indeed go back to drugs. She is now in a spiral of guilt and shame as well as deep confusion and betrayal) She doesn't receive support from her family in her spiritual pursuits and holds a lot of guilt over not continuing to practice the religion she was brought up with. She overworks herself to the point of exhaustion frequently and takes on a lot of extra work, in her words, in order to please people. While she takes a great deal of refuge in the local Yoga studio and the community that surrounds it, she appears to be anxious and concerned about whether she will continue to be accepted. Everything feels like it is on shaky ground for her, and it shows in the way she holds her body. Until she finds something she can feel safe and grounded in, it seems unlikely that she will unravel the pattern of pain she experiences. I don't believe she feels as though anything is in her control, certainly not the maintenance and well being of her own body which is a source of fear for her.

2- A) NAME AND DESCRIPTION

Back Pain

As many as 60-80 percent of Americans are disabled by back pain at least for a brief period in their lives. 14 percent of the population suffers from some degree of back pain, which next to cold is the most common cause of lost workdays.

Back pain can have many different causes from disk degeneration to muscular impairment to plain old stress. The majority of people with back pain are not found to have a specific cause. Recommendations frequently are to exercise more, lose some weight (if weight is an issue) and reduce stress. Dr. John Basmajian, a biofeedback researcher at Atlanta's Emory Medical Center has stated, "Back pain is just a tension headache that has slipped down the back".

Dr. Charles Steiner, a New Jersey Osteopath has found that all but 2 percent of low back pain is caused by muscular spasm, which can be relieved by manipulation treatment. Another study showed that only 1.4 of all patients with back pain actually had disk disease.

Treatments for back pain traditionally include surgery, pain medication, cortisone injections, chiropractic adjustments, ice and/or heat and physical therapy. Many people continue to experience flare-ups of their back pain despite the western medical techniques that they have spent much money on.

When the natural curves of your spine are changed by chronically incorrect posture, trauma, or injury you may develop back discomfort. The postural strain resulting from inappropriate work habits or body use is the most common cause of back pain.

Dr. John Sarno, author of three books on pain (two specifically for back pain) has put a name to a condition that he feels causes much chronic back and neck pain; Tension Myositis Syndrome (TMS). "Studies and clinical experience of many years suggest that these common pain syndromes are the result of a physiologic alteration in certain muscles, nerves, tendons and ligaments which is called the Tension Myositis Syndrome (TMS). It is a harmless but potentially very painful disorder that is the

result of specific, common emotional situations". (Dr. John Sarno, *Healing Back Pain, page 3*)

"A combination of further patient observation and a search of the medical literature suggested to me that tension affected the circulation of blood to the involved areas and that when muscles and their associated nerves were deprived of their normal supply of blood, the result was pain in the back and/or limbs. Specifically, a reduction in local blood supply resulted in reduced oxygen to the muscles and nerves, which appeared to be the direct cause of muscle and nerve pain" (Dr. John Sarno, *Mind Over Back Pain*)

"Statistics suggest very strongly that the cause of most back pain is emotional, for the years between thirty and sixty are the ages that fall into what I would call the years of responsibility. This is the period in one's life when one is under the most strain to succeed, to provide and excel, and it is logical that this is when one would experience the highest incidence of TMS." (Dr. John Sarno, *Healing Back Pain, page 5*)

B) GROSS AND SUBTLE BODY COMMON SYMPTOMS –

Weak muscles and how they affect the low back:

Psoas -If weak or contracted can cause a flattened or lordotic spine. Main hip flexor and low back stabilizer.

Sacro spinalis - If too tight they can contribute to swayback. If too stretched they can contribute to flat back. Overworked, they will spasm.

Abdominals –Weak abs create excess lumbar curvature and an inability to stabilize low back and pelvis. Strong or contracted abs can flatten low back.

Quadratus Lumborum –Imbalance of muscles, from side to side,

Gluteus Maximus- Weakness of muscle creates excess lumbar curve.

Piriformis – Usually becomes hypertonic, which restricts mobility of hip. Problems with this muscle often affect sciatic nerve. Pushing the turn out w/o releasing the problem can often lead to injury.

Hamstrings – Too tight can pull pelvis back creating a flat back

Adductors – If too tight they will pull the pubic bone down increasing lumbar curve.

Weakness – Imbalance of the muscle groups that work together. Most low back problems result from imbalance of flexors, extensors & rotators of the spine and legs. Reconditioning of muscles must take place in order to prevent repeated or chronic injury.

Weakness of muscles – poor posture, injury to muscles
(From *Low Back Pain - Presentation by Brenda Brown and Catheryn Murphy, Integrative Yoga Therapy web site. <http://www.iyt Yogatherapy.com>*)

The affect of low back pain can range from altering someone's Yoga routine to being unable to do anything. When the psoas is involved, nausea may accompany the pain, giving one a feeling that they are hurting to the core. In some cases chronic stress patterns trigger a flare up of familiar low back pain, often with the client being

able to pinpoint what event brought about the pain. Back pain is often used as a “way out” of daily duties when the stress became overwhelming.

Louise Hay in her book *Heal Your Body* shows low back pain comes from fear of money and lack of financial support. In *Stretching Without Pain*, Paul Blakey states stiffness in the low back indicates “a lack of self-trust or lack of knowledge of purpose.”

As most back pain and discomfort is located in the region of the first and second chakra, there may be feelings of insecurity, deep fear, and lack of safety that go along with the physical symptoms.

“When pain remains unalleviated for too long, it triggers a vicious cycle. For instance, pain can cause muscle tension leading to greater pain sensitivity in areas not directly related to tissue damage. Also, as nerves regrow in traumatized areas, they can connect to other types of nerves making entire sections of the body hypersensitive to touch. Chronic pain also causes mental stress (overproduction of norepinephrine) leading to exhaustion, then depression and disturbed sleep. Pain sufferers also tend to guard the damaged area leading to muscular imbalance (some muscles remain unused, others overused) accompanied by additional discomfort and possibly pain.” From *Yoga studies newsletter Jan April 2002 The Yoga Perspective on Pain, Mental Health, and Euthanasia* by Georg Feuerstein

C - RELATED CHALLENGES

Many times back pain will disable a person completely, with the person needing complete bed rest until the episode subsides. This reduces the persons' ability to work, participate in family life and continue on with any of their regular activities. For some there may be fear attached to physical activity that the pain will re-emerge, in which case they may avoid the exercise recommended to heal the condition.

John Sarno points to the challenge for back pain sufferers shared by the general public in the beginning of his book, *Healing Back Pain* (page 1): “... this pervasive concept of the vulnerability of the back, of ease of injury, is nothing less than a medical catastrophe for the American public, which now has an army of semi disabled men and women whose lives are significantly restricted by the fear of doing further damage or bringing on the dreaded pain again.”

3 - AYURVEDIC ASSESSMENT.

Back pain can sometimes be elusive and therefore difficult to pinpoint anatomically where the client is experiencing discomfort. Ayurvedic treatments call for addressing doshic imbalance in addition to treating a fixed muscular skeletal issue.

Stress and tension (pitta tendency), anxiety (vata), lethargy (kapha), feeling unsupported, and chronic stress (fight or flight) which overwork the adrenal glands all relate to low back pain.

(Yoga Therapy Journal web site. <http://www.iyt Yogatherapy.com>)

Vata tends to have more severe low back pain. Pitta will show inflammation with low back pain. Nerve pain is more likely to be an issue for pitas, such as spasms, sciatica and inflamed ligaments. For Kapha, back pain is usually due to an injury or inactivity causing weakness of the muscles. More strenuous exercise is appropriate unless due to an injury to the vertebrae or disks.

(Brenda Brown and Catheryn Murphy, Yoga Therapy Journal web site.)

Pain, stress and anxiety all indicate a vata imbalance. Slow and methodical practices are best for easing vata such as The Joint Freeing Series. This aids in returning awareness back into the present moment and to the body, releasing prana from the joints, and creating muscular balance. Rhythmical movements also tend to unwind stress.

With vata imbalances, the body will self correct when attention is brought to the situation. *"A good way to balance vata is to bring attention to the condition. The main need for vata balance is self-awareness."* (Mukunda Stiles, NYC SYT training, 9/11/04) As in Jenna's case, some self-inquiry and watching patterns in ones life may help to understand how choices made lead to heightened anxiety and flare-ups of back pain.

Deep vata imbalances require life style changes: *"Vata conditions require a lifestyle change over a long period of time, especially in chronic stress related conditions."* *"People with vata conditions tend to move in a circle in their lives. If you keep doing what you've been doing, you will keep getting what you've got"* (Mukunda Stiles, NYC SYT training, 4/1/05)

Weak abdominal muscles or weak hip muscles can aggravate low back conditions, placing strain on the sacrum and interfering with the proper alignment of the spine. Asymmetries can also place a burden on one side over the other, causing pain. This would point to a kapha issue where the client shows a weakness in muscle tone, such as in Sally's case.

Back pain can also come from people who have a tendency to overdo and tax their system and tend towards pitta imbalance. Relaxation and distressing techniques could be recommended along with prolonged yoni mudra and Savasana, such as in Ziva's case.

Yoni Mudra (either while lying prone or supine) can bring the prana back home to the pelvis calming any pain and imbalance. Where the prana goes so does healing, and Yoni Mudra practice can concentrate the prana where it is placed. If done on the belly, hands can be placed over the site of discomfort, if done on the back; Yoni Mudra can be placed directly on the area of pain.

An example of a yogic approach to the treatment of low back pain might be as follows. 1) Detoxification through taking castor oil three times per week for one month to get rid of excess apana; 2) Yoga postures that promote focus and strengthening without reproducing back pain. For example, chair, warrior, cobra; also restorative postures emphasizing self-nurturing and care, relaxation, and stress reduction; 3) Strong even breathing emphasizing the inhale, especially into the areas of pain; 4) Aromatherapy with basil, frangipani, heena, or cinnamon; 5) Grounding activity such as gardening; 6) Imagery promoting strength, safety, courage 7) Mantra: "I am safe, I am secure in the world; I have everything I need to thrive in the world; I can make good choices for myself; It is OK to take care of myself. (Stacy Renz, *Chronic Low Back Pain/Sciatica –Background Paper, page 1 Integrative Yoga Therapy Journal* <http://www.iyt Yogatherapy.com>)

4 – COMMON BODY READING

A rounded back in Dandasana may indicate tight hamstrings creating a strain in the low back by exerting a constant pull on the sitting bones. This tips the pelvis

posteriorly and flattens the normal curve of the lumbar spine. This can also indicate weak psoas muscles. These muscles big part in low back health and comfort, as they are responsible for keeping the lumbar arch in its proper position. Weak psoas muscles can cause a flat back, and tight psoas muscles can create a sway back, or exaggerated curve. An imbalance between left and right side will create asymmetry in the body causing one side to work harder then the other. Overly tight abdominal muscles can contribute to posture that is a strain to the low back. Common procedure for helping low back sufferers is to strengthen abdominal muscles, but the current muscular balance must be taken into consideration and a balance struck between strengthening back muscles and abdominal muscles.

5 - CONTRAINDICATED YOGA PRACTICES and general activities to modify or eliminate.

Working consciously, the student should evaluate how far to extend a particular pose to learn their boundaries. They should not eliminate working with the back completely. When a pose is pressed too far, and begins to aggravate the low back, it should be modified to a more mindful and less stressful pose.

If the cause of the back pain is connected with a doshic imbalance, the manner in which a client practices should take the imbalance into consideration. For example, if the cause of the pain is a weakness of muscles, lots of stretching should be avoided, rather the focus should be on strengthening. If the pain is due to a pitta imbalance and there is inflammation, a heating practice should be avoided. If the pain is clearly a vata issue a slow mindful practice should be encouraged and spacing out or going on autopilot during a hatha practice should be avoided.

6 - RECOMMENDATIONS

A) THERAPEUTIC/FREE OF PAIN

Orthopedic surgeon Dr. William Donaldson has concluded that the most effective steps you can take to relieve back pain are the ones that only you yourself can take.

A randomized controlled study headed by Dr. Karen Sherman at the Group Health Cooperative and University of Washington, Seattle, Washington was done to determine whether Yoga is more effective than conventional therapeutic exercise or a self-care book for patients with chronic low back pain. The results showed that participants who practiced Vini Yoga sequences (developed by Gary Kraftsow) were more successful in relieving their chronic low back pain than those who used a self-care book. These benefits lasted at least several months post trial. The Yoga classes were designed for patients with back pain who had no previous Yoga experience. Relaxation, strength-building, flexibility, large-muscle movement, asymmetric poses, strengthening the hip muscles, lateral bending, and customizing a personal practice were all a part of the program offered to the patients. **(Annals of Internal Medicine <http://www.annals.org/cgi/content/full/143/12/849>)**

Those suffering from low back pain should avoid sitting or standing for long periods of time without stretching. They should maintain a straight spine while lifting and keep the object lifted close to their body. Weight should be managed with the knees, never standing up with straight legs from a bent position. Twisting while lifting should be avoided as well.

People with back pain should be mindful of the position they sleep and sit in. Sleeping on the stomach should be avoided as it puts a lot of strain on the low back.

Mattresses should be evaluated frequently to see if they might be contributing to pain. They should provide good support. Some people also do well putting a pillow between their legs if sleeping on their side to keep the femurs in a neutral position and the sacrum stable. Also bad car seats are a common cause of low back pain. Investing in an ergonomic seat insert is a good way to stay friends with your car. This also holds true for office chairs, especially if most of the day is spent sitting. Men who carry their wallets in their back pocket can perhaps find relief if they carry the wallet in the front of their pants and keep it as thin as possible, removing unnecessary papers.

Potbellies are a common strain on low back, so eliminating excess abdominal weight is a good way to reduce back pain.

Regular exercise has been shown to be an effective way of dealing with back pain. Injury to the back occurs ten times as often if you are not exercising regularly.

Weakness and loss of flexibility in the muscles that support the spine and the natural curves of your back can increase the possibility of strain and injury in the back, including disk displacement

Recommended Yoga asanas for the low back from Structural Yoga Therapy's 24 postures

***Apanasana** held long enough will release back pain or produce a general sense of openness in the body. A prolonged stay of 10 to 30 minutes can release back spasms.

***Urdhva Prasarita Padasana**, upward stretched legs trains the practitioner to distribute effort throughout the back, avoiding strain to any one region.

***Virabhadrasana 1** can relieve low back pain by toning hip extensors.

***Virabhadrasana 2** allows the groin muscles to open and releases compression of the low back.

***Navasana** strengthens to lower body so better sitting posture will be natural and creates physical sturdiness in general.

***Locust** pose strengthens hamstrings and gluteals supporting the back and also allows the spinal column to lengthen, allowing decompression of the back.

Additional Practices recommended by Mukunda Stiles

***Pelvic tilt and thrust**- this series develops the abdominals, lower back muscles and pelvic floor as well as developing the tone of the psoas muscle. This combination can reduce lower back fatigue and pain.

***Rolling Bridge Pose**- creates the ability to isolate the movements of the vertebrae, freeing the joints and therefore eliminating stress, and strengthens abdominals and erector spinae muscles. This is particularly beneficial for people who experience low back pain due to weakness in the low back and gluteal region.

***Runner's stretch**- focusing on quadriceps of the back leg can deepen the stretch of the upper groin, relieving pressure on lumbar spine. Adapting the stretch to pulsing the front leg towards straight stretches hamstrings, which relieve the lower

back strain. When hamstrings are flexible, hip flexors can develop more tone and will be better able to support the low back.

***Yoni Mudra-** Thumbs touch, inner index fingers touch, forming a triangle. This mudra can be placed over the site of pain (on the front of the body as you lie on your back) or directly on the site, with hands either under the body or hands on back as you lay on your belly. Yoni Mudra draws the healing force of prana in towards it. With the Mudra over the lower belly vata returns to its home, the pelvic cavity. When vata is balanced and home, pain leaves the body.

"By placing your hands in the triangle symbol you will reverse the process of energy spreading out to create your individuality as Mudra generates the process of pratyahara, withdrawing prana back to its Source." (**Mukunda Stiles, Tantrik lesson #2**)

Series of Asanas to release groin and low back tightness. (*SYT training, New York City, 2/7/04*)

*Pulsing runners stretch with legs wide apart, gradually drawing front leg straighter moving into Ardha Parsvottanasana (half pyramid position, and back again into runners stretch.

*Spinal undulations while on hands and knees, knees wide apart and big toes together.

*Child's pose with wide knees, then onto hands and knees, taking hips forward of knees and moving into pelvic tilt and thrust. Gradually hips slide forward while continuing the pelvic movement for a few moments in each new position, moving arms forward as needed. Eventually the pelvis will touch the floor. Feet may need to come off the ground.

Sacroiliac Stabilizing Exercise

The sacroiliac is the key joint to the lower body. There have been so many queries on problems related to this that I wanted to share with you an exercise I have devised that relieves a host of offshoot problems - knees, lower back, sciatica, even menstrual irregularities. While these conditions are not necessarily caused by S/i dysfunction, they accompany it. I find that by creating natural motion in the S/i it begins to help vata/pranic energy find its way to balance.

The sacroiliac joint has a small amount of motion: adduction, abduction, flexion and extension. Without these motions or moving into extension (downward) during hip flexion (lifting your knees or sitting), your lower back and hips can be quite uncomfortable. The solution is to mobilize the sacroiliac properly.

The following exercise balances the joint so that as the hip goes into flexion, the psoas will contract with sufficient force to overcome its antagonist, the gluteus maximus, and the joint will flex (move upward). The movement needs to be done regularly for those who have frequent lower back discomfort until the correct pattern of motion is established. This should be done before any other exercises or asanas for those with reoccurring lower back, sacroiliac or hip strains.

Sit on the floor with your knees bent and feet to the right side, so that the right foot points back beside the hip and left foot is adjacent to the right knee. If you are stiff and unable to sit comfortably erect, then place sufficient padding under your pelvis

to make it comfortable to be erect and move. Avoid leaning so far to one side that your hand needs to support you on the floor.

The first movement is to pelvic tilt back and forth from the iliac crest (top of pelvis) exhaling as you contract your belly and round your lower back. Then arch your lower back accentuating your natural lumbar curve by contracting the psoas as you inhale. Repeat 12X, or until you feel the motion becoming smooth, whichever takes longer. You are looking for a feeling of release (Kriya) in the tissue, energy, or emotion that will react to the motions.

The second motion is to take the top of the right thigh (not pelvis) and move it into internal and then external hip rotation. During internal hip rotation your pelvis will lift from the floor, during external rotation your ischial tuberosity (sitz bone) will touch the floor. Inhale as you lift your hips moving into internal hip rotation. Exhale as you lower the hip coming into external hip rotation. Continue for 12X, then reverse your legs and repeat.

When finished stand up and walk in place for 6-10 steps which will assist in promoting stability.

- **Mukunda Stiles**, *Yoga Forums Thu Oct 03, 2002 Post subject: Sacroiliac Stabilizing Exercise*

"Stimulating the parasympathetic nerve roots in the sacrum invokes a deep relaxation response. The gentle rocking movement of the entire spine would also stimulate the circulation of cerebral spinal fluid. This fluid circulates throughout the spinal column and the brain. This may be the mechanism responsible for the calming and soothing effect of forward bending. Since forward bending usually cannot be safely accomplished by someone with low back pain they need to find an alternate movement that creates the same response. The SI joint stabilizer may be doing just that.

Additionally the movements of the SI joint stabilizer allow a gentle increase in disk space and allow manual massage of the discs to take place as a result of the movement." -**Debora Mangala Warner, MS, RYT-500**, *long time student of Mukunda Stiles.*

Excerpts from the "Down in the Back Series" recommended by Judith Lasater in her book, Rest and Renew for relieving back pain.

***Supported Childs pose-** Keep knees wide, build up blankets, to place under the chest and belly, breathe deeply allowing yourself to feel the support of the bolster.

***Supported half dog pose-** Use a sturdy table, cushion with blankets and rest belly and chest on the blankets. This will relieve the muscles along the spine and release tightness and stiffness from the low back.

***Relaxation Pose with Legs on a chair-** Rest lower legs to a chair seat, lie on the ground with neck supported and eye pillow. Place a sandbag on the belly and breathe into the back body. This tends to relax the organs and muscles of the abdomen as well as the muscles of the low back.

B - STABILIZE SITUATION and lifestyle change recommendations;

Keeping weight managed, stress levels low, watching posture and seated positions can all factor into reduction of pain. Even clothing can be an issue; tight waistbands or belts can inhibit natural movement and reduce blood flow in affected areas.

Back pain patients have been shown to reduce their pain by learning relaxation techniques, visualizations and pranayama.

Exercising keeps muscles supple and strong and increases endorphins and enkephalins, our bodies' natural painkillers.

John Sarno offers these two pillars to base healing strategies for his patients:

- 1) Acquire knowledge and insight into the nature of the disorder
- 2) Have the ability to act on that knowledge and thereby change the brains behavior.

(Dr. John Sarno, *Healing Back Pain*, page 77)

C - MAINTENANCE of underlying issues at the root of the situation.

David Frawley, in his book *Heal Yourself with Ayurveda* states "Repression of emotions should be avoided because the restrained energy eventually works itself out in disturbed subconscious reactions. We should not suppress our emotions, which are energies but should treat them with love and respect. We should learn to manage our emotions, like cultivation plants in a garden favoring the flowers and pulling out the weeds".

Noting the patterns that bring on back pain (and so being aware of what the causes are) and then changing these patterns will go a long way to healing chronic back pain as it relates to the emotional body and stress levels. A transformation of destructive habits and an acknowledgement of underlying fears are needed. The practice of witnessing non-self-supporting actions and inquiry can be done with a support group, sadhana circle, and/or a professional therapist.

7 – QUESTIONS AND ANSWERS FROM YOGA FORUMS

Aug 07, 2005 Post subject: Back pain in bridge pose

Q-Whenever I move into bridge pose my lower back hurts. It does not hurt when I use a low block as a prop. Should I just keep practicing with the block and hope that the pain will go away by itself? (Will it ever go away??) Any ideas? Thank you so much

A-I think it depends on the cause of the pain. If it's a slipped disc you should get it seen to! More usually, if you're over 40 particularly, it is likely to be spinal degeneration - wearing down of the cartilage pads between vertebrae, so that when the spine flexes the spinal nerves may be pinched where they exit the spinal column. The pain may never go away entirely, but if you do exercises to strengthen your core muscles they can act as a sort of corset to support the spine, and so make things more comfortable. I think it's important to ensure that such strengthening exercises deal with related, opposing muscle groups: lower back, muscles at side of waist and abs in your case should all be strengthened to produce the 'corset' and to avoid an asymmetry that will damage your posture and be counterproductive.

In Yoga, boat, locust and similar poses; in the gym, back raises, side raises (of upper body and of legs separately); and crunches / leg raises for the abs.

Of course, you should also stretch those muscles (many Yoga and other stretches) as well as building their strength.

But most of all, you should check with a qualified physiotherapist that your Yoga and other exercises are going to improve rather than exacerbate your condition.

A-Age and flexibility are key to determining the appropriate level of practice for each person. Certainly checking that there is not a degenerative condition is good advice. When teaching Camel and Bridge pose, I encourage my students to move slowly into the pose, developing a stable base on each step of the way and to stay in touch with the sensations in the body (i.e. - don't picture the "end position and miss the journey"). If your goal is to benefit from these poses with a flexible, strong and healthy spine, you will focus your attention on the capacity of the thoracic (upper back) to reverse it's forward rounded curvature, rather than on hyperextending and excessively rounding the lower back, (esp. L4, L5, S1) which is often the site of back and disc issues. Youthful people may be pictured on covers of magazines in advanced poses which hyperextend the lumbar spine, but for most of my students, this practice is not beneficial. Pain following your practice is a clear indication of going "too far" out of the bounds of comfort and stability and can lead to problems in the future. Combining strength and flexibility in a considered manner as "Flex" has recommended is good advice. Namaste, Chandra

May 26, 2005 Post subject: Locked jaws

Q-One of my students sometimes wakes up with locked jaws and has asked me if I could advise her of any exercise she could do to prevent this. She is in her mid twenties and sometimes also feels pain in her lower back-and sacrum area. When she observed her jaws were locked, she felt pain on her right lower jaw if she tries to open her mouth.

I have read the topics linked with locked jaws on Yoga forum and I understand that it might be linked with instability in the sacro-iliac area and that I should advise her to go and check this out with a Cranio-sacral practitioner. In her case, would you also suggest any particular asanas which might help to strengthen the sacro-iliac area and prevent this?

Shall I also advice her to meditate on her throat chakra? Many thanks Mukunda for your insights.

A-For jaw troubles the main exercise is self-massage and persistent relaxation. The massage of the masseter muscles is down from in front of the ears in the area of sideburns. For some meditations on the throat or third eye can help too. Just imagine the third eye is opening like a physical eye and seeing with your intuition. In this case seeking to know what can be done. Disregard the why question.

If there is a sacroiliac issue the main movement to tone is the external hip rotation. This is done in locust or cat while lengthening one leg and turning the foot out. The muscles are the lateral sides of the gluteals. Feeling tone there as you do this motion.

If the issue is suppressed emotions, trauma, or mind not wishing to think what it is

thinking then throat chakra meditation can be most helpful. Chakra is both of these levels. Ask and find out. Namaste mukunda

Jun 06, 2005 Post subject: lumbar pain

Q-I attended one of your workshops recently and you gave us an exercise to loosen up the lumbar area. I have chronic lumbar pain from a Yoga pose I did wrong a couple of years ago. I have your joint-freeing CD and use it, but the pose you showed us isn't on it...and as I recall, it was a bit harder, with the leg (or legs?) extended. Can you help me recall how to do it? Thanks!

A-I suspect what you are asking for is the sacroiliac mobilization exercise done by sitting in Z pose with the feet placed to the side. One foot adjacent to inner knee other foot beside outer pelvis. First part is to rock the pelvic back and forth 12X then lift the hip of the foot outside it and turn the thigh into internal rotation so your torso will twist. Move in and out of both motions 12X until your body releases hip or lumbar pain due to improper motion of sacroiliac. More details in person or from any of my students, graduates are listed on my website. Namaste mukunda

Dec 30, 2002 Post subject: Yogasana for Relief from Back Pain

Q- I am suffering from Back Pain since 3 years. I work for a software company in India. Recently Yoga session started in our company and I joined it. I don't remember all the names of asanas correctly. I get immediate relief from back pain within 5 minutes after starting Yoga session. But the session is held weekly and hence after 3 or 4 days my back pain starts again. I request anybody to suggest me asanas which I can do daily and which would bring relief to my back pain.

A- In my experience, the rolling bridge pose as I learned it from Mukunda Stiles has been of tremendous help for me and my Yoga students as a therapeutic treatment of back pain. I have found it to be helpful for pain relief throughout the spinal column when done slowly, progressively, and with attention to the physical response of the body. For people suffering from back pain, I recommend this one dynamic (flowing on the breath) asana above all others. If you would like instruction in this asana, it is best given in person or by reviewing the instructions in Structural Yoga Therapy. If you would like, I can give you general technique through this forum.

You do not state the specifics of your back issue. If this is a chronic condition, you may want to post to Mukunda or make arrangements to see him for a private session so that you can receive specific and personalized instruction. Generally, back pain indicates a weakness or imbalance of the muscles which stabilize the spinal column. You may need to strengthen muscles in your belly or your back, or to stretch muscles which are holding tension or are short in proportion to their antagonist (opposing muscle). Overall strengthening exercises as found in a good general Yoga class will help you to develop your general fitness level, decreasing the pain level, and to become more aware of the area of tension or weakness which is causing the back pain, empowering you to appropriate action to avoid it in the future. Namaste, Chandra

Apr 26, 2005 Post subject: Stretching and Strengthening A Weak Back.

Q - My father has suffered from a bad back for most of his life. He's thrown it out a quite few times, but it isn't really damaged.

I had the same thing when I was younger before I started Yoga, but I don't think I

can start him on my routine because his back muscles are weak and any dramatic activity causes him some pain. He also fears throwing it out, so he's worried about the type of exercise. Could you suggest safe exercise/exercises that would stretch/strengthen his back?

A- First of all I always recommend my Joint Freeing Series to make the whole body limber. It is systematic moving through all the joints and all their motions. Then secondly I would recommend doing the cobra and locust without arm or shoulder effort. Both poses should be gradually held longer while lengthening the spine. The goal would be to hold the poses for 10 smooth steady breaths. By that time the back will be much more stable. Namaste mukunda

Mon Dec 01, 2003 Post subject: back went out

Q - Something else very intense happened a week after I saw you. My lower back, sacroiliac area just went right out. There were precipitating factors but I usually have thoracic problems not lumbar. I have had amazing practitioners and have been quickly healing -- but it is still quite extreme and I have no idea how long it could be before it is (all?) healed. I may write you with more details but just wanted to throw out that big picture. I actually think back stuff is about trust and when we are injured somewhat seriously we must surrender quite a bit and soften up.

A-It is often I find that sciatica is triggered by not feeling support by someone who is in your inner circle. Why at this time I cannot say.

Apr 27, 2002 Post subject: low back pain

Q -Am grateful for your service and this opportunity to learn from you and serve my students better. This one is a 50-year old who has been coming to my Swaroopaa Yoga classes consistently twice a week now for a year. He has a relatively rigid body but has loosened up

significantly. He has come to understand himself much more, and understands that releasing one layer might bring up deeper-held tension at a deeper layer. One so-called "flare up" has been nagging him.

"Hi P, regarding the knot, for the past few years I've had an occasional problem with my back on my left side. When it flared up the pain was moderate to severe and would last about a week. The pain was centered in the same muscle group that the rotated belly pose [Jathara Parivartanasana, knees bent, to side] stretches, but with most back pain it would spread around a bit. The pain would always start a day or so after an activity that caused the flare up, it would never start during the activity. An activity that could cause a flare up may be sitting on a stool and working under a bathroom sink. The bending/twisting motion while reaching down below my waist level could cause a flare up. Unfortunately during and after the activity everything felt fine, it's the next day or several days later when the pain would occur.

While the rotated belly pose works the same general area it didn't seem to help with this particular knot. What's strange is when I'm feeling pain from a flare up and do a rotated belly pose, while stretching the same muscles that are in pain the pose didn't seem to affect the pain. Anyway I started to notice side stretches [Ardha Chandrasana, especially, as well as seated side stretch, part of the JFS] caused a milder version of the same flare up pain. While doing the side stretches I felt the normal stretching sensation, it was the next day I would feel the pain. So my plan is every day do a very gentle side stretch and increase the time I hold the position. If the next day the pain is very mild I'll know I held the stretch the correct amount of

time. No pain or too much pain I'll adjust the holding time. For now I'm doing the side stretch with my hands on my waist but bending my hips and adjusting my weight the same as we do in class when our arms are over our heads. I appreciate you looking into this for me and would value your opinion on what I should be doing. Thanks" ...A

A-P and A - On the deeper level I wonder about his kidneys and adrenals and possible suppressed emotions that might be held there. Delayed reactions to practices are signs of this and kapha imbalances. On a technical level I would make sure he is elongating pelvis away from rib cage during all twists. In general my concern is to elongate first on inhalation and twist second on exhalation. Also to end the pose when either intention is not manifested. If there is no movement or feelings of energy/emotions opening then the pose is done.

Apr 27, 2002 Post subject: low back pain

Q-I took your weekend seminar in Calgary in October. You showed us two hip opening movements in which you said they were the best things to relieve lower back pain. The movement was a rocking of the hips and pelvis forward and back, then rotating the thighbone externally and internally. What about them relieves lower back pain? Also, I got a lot out of your weekend here.

A- The movement is done by sitting unevenly with both feet to the same side. From there moving the top of the pelvic (iliac spine) into pelvic tilt and thrust (flexion and extension) 12-15 times creates a freedom of the lumbar spine to move both laterally and with repetitions of flex and extend, it also released a pent up sacroiliac joint. The second movement done by holding the top of the femur and rotating internally while lifting the hip off the floor then externally lowering the pelvis to the floor frees up the hip socket and all the gluteal muscles that cross the hip joint. Many of these muscles affect the sacroiliac and mobilizing them promotes a wave of circulation and energy to the lumbar sacral region.

Thu Mar 03, 2005 Post subject: back strengthening

Q-Hello there! I went to a bodywork practitioner (the Sawas method) and he recommended the following back strengthening exercise:

Lie face down on a table with only your legs on the table and the rest of your torso is dangling down at a 90 degree angle (like Dandasana rotated 180 degrees)
(have a friend hold down your legs flush with the table for support or use a special gym machine)
While your legs are being held down to the table, lift your torso up till it's parallel to the ground and in line with your legs that are still pressed to the table
Then lower the torso back down to 90 degrees (so your torso is in a headstand-ish position)
Then raise back up to former position.
Do 12-20 reps, 2 times a week

I would like to get your opinion on this exercise.
How does it compare to backward boat pose, locust, cobra, others?
Does it sound safe to you?

I have not yet tried it so I don't know how it feels. The practitioner seemed to feel

that it was the most effective back strengthener.

Thank you so much for your time and helpful discussion board.

A-This is for a moderate to strong back to get even better. I would not recommend it for anyone in pain. Instead locust and cobra without arm helping are better. I prefer to build tone with a gradually progressive sequence that builds to 12 breaths holding time. All the poses you mention are ideal to build that. If your back is not strained and are fully recovered from injuries then I would say fine to this suggestion.
Namaste Mukunda

Apr 26, 2002 Post subject: low back pain

A-For many years, I have suffered from lower back problems, esp. on the right side. I have searched for a long time for understanding and relief. About two weeks ago I took a Yoga workshop with a Canadian Iyengar trained teacher and he encouraged us to "unlock" the pelvis in order to free the groins. In Parsvakonasana, for example, he asked us to tip the pelvis forward until we felt it "lock" and then to back off just enough to where it felt free again. Now I've heard this kind of direction before, both through years of modern dance training as well as through Yoga. I've even "taught" it. Well, that day something changed dramatically. It became very clear that I had been very well trained to hold my pelvis in a little pelvic tilt (like I thought I was supposed to), but that this deeply patterned habit's time was up. My pelvis is now in a slightly tilted position (in the direction of the "dreaded" swayback or lordosis) and I feel truly liberated. I feel lighter and my spine feels long and free. My backbends have now become very free as my lower and upper back sections both can move in complement to one another. I feel inspired to do lots of backbends too. I feel new energy and lightness in my Asana practice. I feel as though I have received a gift. Here's my question:

What is the cause of this? Some significant events in my sadhana life have been things like a customized asymmetrical Asana practice from you, an intensive satsang and Yoga therapy studies at RMIYA this summer, switch to vegetarianism, Ayurvedic treatment, initiation/transmission from my guru, deepening sadhana practice, and letting go of a decades old wrong neuromuscular pattern of "centering my pelvis" (perhaps AKA "being in the right place at the right time?"). Is it grace? I just feel very grateful. Much love and light to you, your family, your students and your teachers. K.

A-It is wonderful to hold yourself in the place of looking for Grace. This place of holding yourself or returning yourself to is a great blessing. When one looks for Grace, what else can be found? On another level the backing off of full range of motion or a "locked position" is the only place where change can occur. The end point has no potential for eliciting change. So students of Yoga will always find change occurring when they back off as Patanjali says so eloquently in his Yoga Sutras II, 47 "The perfect posture is attained by relaxation of effort, lessening the tendency for restless and meditation on the infinite." Seek Ananta, the infinite, and Grace is the result. On the most profound level this is truly what your Yoga practice has been all aimed at. Hold onto gratefulness and gratitude.

My good friend Jean Couch (author of Runner's Yoga Book) of Palo Alto has found that backing off yet increasing the pelvic angle, hence enhancing lordosis creates a state where "balance" as she calls it can occur and joint pain disappears. She has studied many 3rd world cultures that literally have no joint pain and finds that their pelvic stance is at the base of a way of being in their bodies that keeps them free.

She teaches this method individually and to movement therapists. See <http://www.balance.com> for details.

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9 - APPENDIX

1) Lumbar Laminectomy

Lumbar Laminectomy (open decompression) is a surgical procedure that is performed to alleviate pain caused by neural impingement. The laminectomy surgery is designed to remove a small portion of the bone over the nerve root and/or disc material from under the nerve root to give the nerve root more space and a better healing environment

Laminectomy surgical procedure
the lumbar laminectomy (open decompression) differs from a microdiscectomy in that the incision is longer and there is more muscle stripping.

First, the back is approached through a two-inch to five-inch long incision in the midline of the back and the left and right back muscles (erector spinae) are dissected off the lamina on both sides and at multiple levels.

After the spine is approached, the lamina is removed (laminectomy) which allows visualization of the nerve roots.

The facet joints, which are directly over the nerve roots, may then be undercut (trimmed) to give the nerve roots more room.

Post-operatively, patients are in the hospital for one to three days, and the individual patient's mobilization (return to normal activity) is largely dependent on his/her pre-operative condition and age. Directly following the procedure, patients are encouraged to walk. However, it is recommended that patients avoid excessive bending, lifting or twisting for six weeks in order to avoid pulling on the suture line before it heals. (<http://www.spine-health.com/topics/surg/overview/lumbar>)

2) Sacroiliac Joint Exam:

In cases where there is lower back or hip pain/discomfort, or client reports one leg shorter check the SI joint. Locate the dimples on lower back. Feel through the clothing for the raised area of the iliac/sacral prominence and place thumbs there. The ideal position is with the thumbs parallel and horizontal so that you can feel both the iliac and the sacrum of the sacroiliac joint. Check for symmetry of height.

Have the client lift the right knee above waist height (client can hold a support for stability). The thumb on the right side will rise one quarter to one half of an inch. Repeat having the client raise the left knee. Compare this with the right side. Repeat this process 2-3 times. If the joint moves down on either side or doesn't move, then give the client the sacroiliac stabilizer exercises. (*From Structural Yoga Therapy Physical Exam Manual*)

Recommended poses for case studies

3) Vamp



4) Vamp with leg lift, internal rotator strengthening



5) Windshield wiper pose (alternative to SI mobilization series)



6) Maha Mrytunjaya Mantra

Om Triyambakam Yajaamahe
Sugandhim Pushtivardhanam.
Urvaarukamiva Bandhanaat
Mrtyormuksheeya Maamrtaat.

Om Three eyed one (Lord Shiva), we worship you, full of fragrance and one who increases strength. Just as a ripe cucumber is plucked from its bondage to the creeper, May He liberate us from death for the sake of Immortality

7) Piriformis release. Client is lying in a prone position with legs apart to 30 degrees of abduction. Bring the affected side knee into 90 degrees of flexion, while supporting their ankle to give you leverage to manipulate hip rotation. With your other hand find the head of the greater trochanter. Place the heel of your hand medially to the trochanter so the heel of your hand pushes into the hip external rotators. The hand can be repositioned with feed back from the client to help you locate the piriformis, while avoiding direct pressure on the nerve. Apply a mild

pressure with the heel of your hand bring the foot out to the side laterally to move the hip into internal. Then reverse the leg direction keeping the hip abducted as you gradually increase the pressure moving slowly to put the hip into a passive external hip rotation to release the nerve. Repeat into both internal and external rotation 6-12 times or until a release is experienced.

**(Max Isles SYT Paper on Sciatica, Laguna Beach, California May 2005
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10- Biography of Author

Bonnie Pariser is the founder, director and senior teacher at Yoga Loka in Frenchtown NJ. She started practicing Yoga at Sivananda Yoga Center in NYC in 1986 and has been teaching since 1998. She completed her initial Yoga Teacher Training and her first Therapeutic Yoga Teacher Training at Saraswati River Yoga in New Hope PA with Kirin Mishra. Bonnie is continuing her Tantric studies with Kirin Mishra in "The Saraswati Program, Path of the Bhairavi". She has been studying Structural Yoga Therapy with Mukunda Stiles since 2003. Bonnie lives in Bucks County PA with her husband and two young children.