# Sciatica with Disc Disease

Structural Yoga Therapy Course

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Karuna

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#### 1 - Case study

NS is a female, 39 yrs old, a single mother and works as a Production Coordinator at HBO. NS has experienced lower back pain since her daughter was born, 5 yrs ago. However, on Dec. 24, 2007, NS went to the emergency room with severe pains in her lower back. X-rays/MRI's show that NS has bulging disks L3 and L4. NS has been treated by an MD since January 2008. The MD is a doctor of physical medicine and rehabilitation. He specializes in lower back pain and spinal diagnostics and is also an avid Yogi. NS takes OTC anti-inflammatory when needed. NS was very active before Dec. 07, when she would take 3 classes at a local gym. NS is now trying to start a regular practice with yoga. NS insurance had covered all the treatments she could take with her Doctor. Upon his recommendation to take yoga, NS came to my yoga class. I announced I was looking for a volunteer for my case study and NS showed a great interest at the opportunity. She is very motivated and wants to meet more than once a week and wants to do more asanas.

One of NS's concerns is weight gain, since she is no longer able to do cardio workouts. She also used the classes as a form of stress release as she says "I can sweat out the stress".

#### a - Initial intake -

Assessments were done in two separate sessions due to discomfort in lower back when lying down to long. The first session was based on her goals and expectations of this program and building a rapport. We started with body reading and muscle testing to determine strength before assigning asanas from the Joint Freeing Series (JFS). The 2<sup>nd</sup> session I assessed her ROM, but could not complete a full diagnostic due to discomfort.

#### b - Physical assessment

SELF ASSESSMENT POSTURE BODY READING

Lower back pain and weakness Hyperlordosis

Weak abdominals High shoulders

Weight Gain Lateral rotation of left hip

Stress/Anxiety Short chest breaths

Range of Motion Assessments							
Joint Action	ROM	7/16	7/16	9/24	9/24	11/5	11/5
	Norm°	Left	Right	Left	Right	Left	Right
ANKLE							
Plantarflexion	50°	40	15	40	40	40	40
Eversion	20°	10	35	20	30	15	30
Inversion	45°	30		40	40	35	40
KNEE							
Flexion (Supine)	150°	135	125	150	150	150	150
HIP							
Flexion (Bent Knee)	135°	120	140	135	130	130	130
Flexion (Straight-Leg Raise)	90°	95	98	90	95	90	90
Internal Rotation (Supine)	35°	70	45	35	30	35	30
Internal Rotation (Prone)	35°	65	65	30	30	30	30

Muscle Testing Assessments						
Joint Action	7/9	7/9	9/24	9/24	11/5	11/5
	Left, 1-5	Right, 1-5	Left, 1-5	Right, 1-5	Left, 1-5	Right, 1-5
KNEE						
Flexion	3	3	5	5	4	4
HIP						
Hip Flexors & Abs (Supine)	2	2	4	4	4	4
Hip Flexors - Bent Knee (Supine)	3	3	5	5	4	4
Iliopsoas Isolation (Supine)	2.5		5	5	4	4
Adduction (Side Lying)	3	3	5	5	4	4
Gluteus Maximus Isolation (Prone)		3	4	4	4	4
External Rotation (Prone)	3	4	4.5	4.5	4	4
Internal Rotation (Prone)	3	3	4.5	4.5	4	4

# c - Summary of findings -

What is tight?	What is weak?	What muscles need release?
RECTUS FEMORIS	HAMSTRINGS	ERECTOR SPINAE
	INTERNAL/EXT ROTATORS	QUADRATUS LUMBORUM
	ADDUCTORS	
	GLUT. MED/MAX	

#### d - Recommendations

#### 7/9/08

NS and I met for the muscle testing and to discuss what was her main concern. During the testing we took short breaks so she could bring her knees up to chest (apasana) to relieve stress in lower back while lying down. NS wants to build the strength in her back and abdominals. NS complained that her lower back hurt more when she was sitting, or lying down without support rather than standing. Because NS tested weak in hip external/internal rotators and adductors, I started with just a few asanas from the JFS series. I went through each pose with her, explaining the breath and the form. She is very motivated she wanted more asanas. I asked her to start with these and do them 4'x a week and then we'll add to her practice.

RECOMMENDATIONS: #5, #6 & #8 from JFS and Child's pose with yogi mudra.

Hip internal/ext to help strengthen both, spine extension/flexion to release erector spinae and strengthen rectus abdominis, hip Abd/Add to strengthen adductors and gluteus medius and Child's pose for overall release with yogi mudra chest opener for release of stress and respiration.

#### 7/16/08

We met at the gym for ROM testing. NS had informed me as soon as we started that she was stressed and was feeling it in her back. I asked her to lay down and slow down her breath. I had her bring her knees to her chest to stretch the lower back. I had to finish early when performing the Range of Motion tests, lying on her back was causing her too much discomfort. I asked her how she was doing with her homework and she said she did it 2x and took a yoga class. I asked her to try to do 4x's a week in order to see/feel progress. We went over the homework and I made a few corrections with her breathing and posture.

# NO RECOMMENDATIONS EXCEPT TO DO HOMEWORK 4X'S A WEEK

#### 7/24/08

Our next session NS shared the "stretches" her Doctor had advised her to do, she says she has been doing these along with the asanas I have prescribed. She is really trying to do all of the work given to her she does what her doctor had recommended in the morning and JFS in the evening. When she showed me the "stretches" a few of them were the same except she was doing the "stretches" on her back. We went through all the poses, she still had a little shakiness when doing the hip int/external rotations but she said it doesn't hurt, just felt like work (this is good). We discussed pranayama and mantra before starting asanas. I went through the wave breath and mantra "With Great Respect...." I sent her an email with the words and directions to review the wave breath at home.

RECOMMENDATIONS: Added JFS #7 Hip ext/flexion to strengthen hamstrings, gluteus max/med, wave breath to learn to utilize full lung capacity and for balancing Vata. She is already doing pelvic thrusts with rolling bridge given to her by her doctor.

#### 7/30/08

Our weekly sessions have been focused on NS practice and level of pain, which has shifted to the left side. We discussed her practice with pranayama and mantras, she is fine with the breathing practice and is even practicing that at work when she gets stressed out it helps her relax. NS would prefer to read a scripture from the bible she feels a more spiritual connection rather than saying a

mantra. I explain that is what mantras are all about and I respect her choice and to continue. We were doing a bit more talking today and NS was telling me about the stressors in her life, work and being a single mother. She is trying to balance a life with her 5 yr. old daughter with a very demanding job and she feels guilty when the job sometimes takes priority. The Father is in the child's life but it doesn't sound like there is a lot of support from that end. NS is also struggling with weight gain and wants to do more vigorous exercise and release stress like she used to. She says the breathing practices have helped with stress but it doesn't burn calories. We went through her practice and she showed me the poses she really enjoys doing (spine ext/flexion and hip ABD/add) and how much stronger she is feeling.

RECOMMENDATIONS: Added JFS #7 variation of sunbird with leg out, back to center and then down, dynamically to strengthen hip extensors; JFS#16 to release tension in shoulders from sitting at computer and stress; JFS #17 with arm over head for release in QL and erector spinae; JFS 18 spinal twist – abdominal strengthening

#### 8/7/08

NS had gone to the doctor's earlier this week with severe pain in her back. Apparently this was a follow up, The pain was due to menstruation. NS has fibroids and they cause very painful periods. I asked NS if she wanted to skip this session, but she was feeling much better. NS has shown quite a bit of improvement she has become more aware of what she is feeling and where in her body she is feeling it. She described how great child's pose with yoga mudra feels like she can really breathe. She also demonstrated the poses in which she feels stronger – spine and hip extension/flexion. She did not do the new poses I added last week because it was too much right now. I showed her legs up on the wall and reclined bhada konasana and yoni mudra when she had severe cramps.

RECOMMENDATIONS: Yoni mudra, meditation and visualization to shrink fibroids. I added Sacroiliac Stabilizer.

#### 8/13/08

**Phone conversation** – NS has been continuing her home practice and is feeling much better. She is preparing for vacation and didn't have time to do the assessments. She asked if we could schedule the testing when she returns from vacation. She asked me to email her the JFS and SI forms so she will have them available on her trip.

#### 8/18 - 9/3

NS has returned from vacation, she seemed very relaxed. She spent time with her family and says she feels great but admitted she had not kept up with her practice. NS asked to postpone testing until she was back on her regular schedule (work, child care and home practice).

#### 9/24

NS was ready for testing and was in really good spirits. Her pain has diminished and the only time she feels severe back pain is during her menses. We tested the areas that were weak in the first assessment. I was impressed by the strength and mobility she demonstrated during the testing. NS told me she has resumed some of her cardio classes but she limits her participation being mindful of re-injury.

#### 10/1

**Phone conversation** – NS could not meet today, due to menstruation. NS is suffering from severe cramps and the pain in her lower back is exacerbated by the fibroids. NS is seeking medical attention for the fibroids. I gave her technique #4 – Yoga Sutras II, 50 from "Pranayamas for Healing and Pain"

#### 10/15

Checked in with NS, she has been to the doctor's and they recommended hormone therapy to reduce the size of fibroids. The therapy has caused her to bleed profusely for two weeks straight. She is going for a follow up this week. NS mentioned she had not been doing any of the practices except for savasana and pranayama for pain, this helps alleviate the pain and anxiety.

#### 10/22

**Phone conversation** – NS is feeling better. The medication is working and she is getting back to her normal routines. However, the stress level at work has not diminished. NS will be traveling on photo shoots for the next month. We discussed her practice and maintenance program going forward while she is away. I gave her a copy of the SYT asanas which I asked her to do on days she felt strong alternating with JFS. NS seems to be compliant when she is not suffering from the condition of her menses. We still have one more assessment to go, we will see if she continues her practice while she is away.

#### 11/5

Final assessment – NS has agreed to the final assessment, but does not feel she needs further treatments. "I am feeling much better, and I don't have pain." The assessment showed a difference in the strength but her mobility remained the same.

#### e - Results of your recommendations

The assessment shows great overall improvement. Increased muscle strength in hip external/internal rotators, hamstrings and adductors. Increased or stabilized range of motion in knee and hip flexors. Rectus abdominis and psoas also showed improvement. Client is out of pain and has resumed normal daily activities including aerobic classes. 9/24

Final assessment results were similar to second, with a slight change in strength. The client is out of pain and continues to function well in her daily routines. She continues her yoga practice at home but has dropped aerobics due to time constraints.

# 2. a – Name and description Disc Herniation of L3, L4 and SCIATICA

Herniated disc – The bones (vertebrae) that form the spine (backbone) are cushioned by small, round, flat discs that have a tough outer layer annulus that surrounds a jelly like substance in the center called the nucleus. These discs are located between each vertebra in the spinal column and act as shock absorbers for the spine. When these discs are damaged from an injury, normal wear and tear, or disease, they may bulge abnormally or break open. This is called a slipped disc or herniated, respectively.(Neurosurgery.com)

Lumbar Radiculopathy also known as Sciatica

Is a condition caused by a herniated/ruptured disc that presses on the sciatic nerve. The sciatic nerve is made up of nerves from the lower lumbar and sacral vertebrae. These nerve roots leave the spine through holes called the neural foramina and can be irritated by ruptured discs. This irritation can result in poor function and pain in the nerve root called radiculopathy. (Nationalpainfoundation.org)

#### b – Gross and subtle body common symptoms

Disc problems usually cause acute pain in the lower lumbar area where they usually occur, they can also affect the cervical spine but rarely the thoracic. Symptoms of disk problems include pain numbness or tingling sensations in the legs and feet or sharp immobilizing pain in the back. Disc herniation in L3, L4 results in muscle weakness in the gluteus maximus/medius/minimus; Iliopsoas; anterior tibialis; quadriceps and adductors. (Kuri, 2002)

Sciatica is commonly associated with herniated discs which result in pain and or numbness radiating through leg and feet.

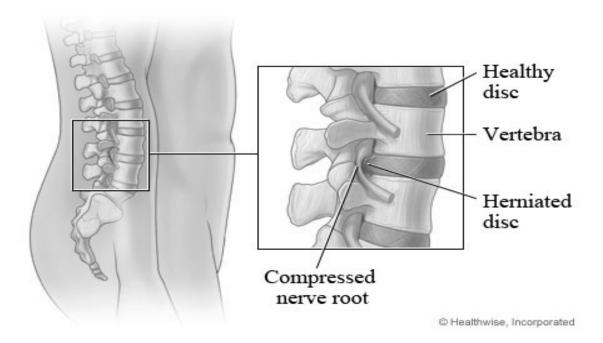
Chronic distortion of the back's natural curves increases pressure on the discs and articular surfaces, causing them to flatten, wear out or give out. Collapsed discs allow vertebrae to slip back and forth on each other causing instability in the spine. The ligaments and fibrous part of the disk can then be stretched or torn, resulting in severe pain.

Clarification of slipped disc/bulging disc –vs- Ruptured/Herniated disc

"Slipped" – "Bulging disc" – the nucleus presses against the annulus creating a bulge into the spinal canal.

"Ruptured" –Herniated disc –nucleus squeezes out through a tear in the annulus.

Exacerbated by dehydration the displaced substance (nucleus) begins to harden and can pinch nerves or press on spinal cord causing pain, numbness and tingling sensations and can lead to bladder and bowel disturbances.



#### Subtle energy bodies - Koshas

Back pain is related to the mind – Manomaya Kosha and the perception of stress. Stress begins to manifest in the Manomaya kosha and is expressed as irritability, emotional instability, sleep disturbances or difficulty in making decisions. Eventually these disturbances cause the imbalances in the Pranamaya Kosha(Energy). The fluctuation of Prana results in digestive problems such as constipation, poor appetite, gastritis, flatulence, etc. Ultimately, these disturbances appear in the Annamaya Kosha (physical/matter) as musculo-skeletal pains, muscle spasms, inflammation etc.

#### **c – Related challenges** – lifestyle, diet, limitations on activities

Lower back pain can reflect nerve, muscle or disc irritations. However, pain can also be caused by degenerative conditions such as arthritis, disc disease, osteoporosis, viral infections, or congenital abnormalities in the spine. Lower back pain can also be an indication of a more serious medical problem such as pain accompanied by fever, or loss of bowel or bladder control, progressive weakness in legs may indicate a pinched nerve or other serious condition such as cancer or diabetes. (Ninds.NIH.gov)

Herniated discs can cause little to severe pain. Caution must be used when bending or lifting heavy or large objects. One must begin adapting better posture habits and maintain optimal weight. Take frequent breaks if they sit or stand for long periods of time. When sleeping use pillows under legs to relieve pressure on spine. Suffering from chronic pain can cause depression as normal daily activities become difficult to accomplish. Insomnia is also a result of chronic pain and can also affect the person's disposition and can also contribute to depression or irritability.

# 3 - Ayurvedic assessment and Ayurvedic based yoga recommendations

The vikruti (dosha imbalance) of Herniated Discs is Pitta/Kapha due to the inflammation of the disc and surrounding areas and Kapha because it is bone structure. Sciatica is also present in this case which is associated with Pitta and Vata.

In all cases with pain, you must treat Vata first.

# VATA

- Bring balance to Vata Prana 3 part Breath
- Relaxation savasana, child's pose
- Relieve pain dynamic asanas, JFS

#### **PITTA**

- Develop a practice that is stimulating and interesting
- Become aware of sensations
- Be mindful not to overheat or bring heat to head
- Drink plenty of water for cooling and hydrating benefits

#### **KAPHA**

- Begin to develop strength and stability in the areas that have tested weak
- Practice meditation and pranayama to develop faith, spirituality and feelings of Love.

# 4 - Common body reading

POSTURAL CHANGES	TIGHT MUSCLES	WEAK MUSCLES		
LORDOSIS	Lumbar erectors, Psoas, Hip flexors	Middle trapezius, Rectus abdominis		
FEET TURNED OUT	Psoas, External hip rotators, Sartorius, Gluteus maximus	Tensor Fascia Latae, Gluteus minimus		

In general, L3, L4 disc herniations cause pain in the post lateral thigh, lower back, down to the knee and in some cases to the foot, causing the foot to turn out. The areas and muscles that are affected - are the hips (Tensor fascia latae, Psoas, Adductors, Gluteus Med/Min) leg (quadriceps, Anterior Tibialis). (AFP.org)

Standing, sitting or laying down flat on back can be uncomfortable. Depending on the muscles that are weak or tight, clients can display titled pelvis, flattened or overarched spine, feet turning out to sides and awkwardness in gate.

# 5 – <u>Contraindicated yoga practices</u> and general activities to modify or eliminate

Forward bends, binding and inversions are contraindicated and depending on the direction of the herniation some back bends are also contraindicated.

Any vigorous form of yoga or Bikram yoga is contraindicated as the heat will irritate an already inflamed condition.

#### 6 - General recommendations for the condition

# a - Therapeutic/free of pain

- ✓ Physicians clearance to ensure there are no underlying conditions
- ✓ Check daily routine to see if there are any routines or movements that need to be eliminated or modified.
- ✓ Check stress level on a daily basis
- ✓ Manage pain with Structural Yoga Therapy relaxation and pranayama

#### **b – Stabilize situation** including lifestyle recommendations

- Do Structural Yoga Therapy Assessments to determine muscle weakness and tightness.
- Develop a program using JFS and SYT 24 asanas
- ➤ Become more aware of body sensations, ie when stressed where do you feel it or where do you hold it?
- Take breaks from sitting or standing for long periods of time.
- Practice breathing exercises and meditation.

#### **c – Maintenance** and long term considerations

- Maintain yoga practice
- Maintain weight

Be mindful of proper posture and lifting

# 7 – Questions and answers on Yoga Therapy from www.yogaforums.com

August 17, 2005 Q & A by SYT trainees:

**Question # 1:** I had a man; late 30s walk into my studio today asking for a class to help him with his sciatica. He says it starts in his right hip and radiates down to his left toes. I told him we should work privately rather then coming to class and I am seeing him on Tuesday. This of course made me consider the work we did this weekend on sciatica and I felt my understanding is incomplete. I will test him for ROM in the hips, psoas strength, and sartorius strength, hip extensors and "gluteal isolation" test. My question is, what do I do with these findings to recommend a course of action? We want to stretch the hip flexors and adductors, and strengthen the gluteals on the side of sciatic pain in most all cases, modifying the poses recommended so they are pain free, correct?

**Answer:** Correct that information takes priority in giving recommendations. The client should have several variations of motions for each of these general guidelines. Then give also some guidance on his postural, ROM and MT uniqueness.

Q2 - Runners stretch for hip flexors, sunbird and locust for strength, with toes turned out perhaps, encourage lots of water. Would this course of therapy change depending on the results of the evaluation? I didn't see a connection between the tests we practiced and the therapy we practiced and how that related. We just talked about 10 minutes today, so I don't have a lot of information.

A - All those are fine to use. I see how people react and give more if they are motivated and if not then give milder variations if less motivated to daily practice. Optimal is minimum of half hour daily

Question #2: I just got a call from a woman (late 30's) who wants an assessment next week. Her main problem is that she has uterine fibroids and a prolapsed uterus. She would very much like to avoid a hysterectomy and is hoping that she can do yoga to prevent that. I have not seen her yet but I think she has a regular practice. My first thoughts are to have her strengthen her pelvic floor with kegel exercises, also pelvic tilts, bridge and maybe shoulderstand? What are your thoughts? I have always heard that squatting is good to prevent uterine prolapse but when that is a problem would squatting be beneficial? What is going on from an ayurvedic perspective? I have Christine Northup's' books Women's Bodies Women's Wisdom and the Wisdom of Menopause, I'll read up on things before she comes. Thank you for your continuing guidance

Answer: Fibroids can be eliminated according to Susan Weed, master herbalist and author by 30 day diet of raw beets; on going preventing is one a month. You might also see books Luna Yoga which she contributed to and Nawa Yogini Tantra on women's issues from the Bihar School of Yoga. Pelvic floor strengthening is definitely a good idea but more directly for Prolapse is to do Uddiyana bandha must be worked up in sequence mula first, Agnisar dhouti then Uddiyana. Also rolling bridge is quite useful the going down motion is what is used for prolapse of uterus, colon and also for hernias. It can also replace herniated disc. A fabulous position to do. Full inversion is fine if she is safe. Squatting not recommended. Also suggest looking at the Female Pelvis by Calais-Germaine for anatomical reference book. Vata imbalances are in pelvic region, they have to do with displacement of rhythmic functioning organs, as well as tissues displaced for home site. Loss of tone is diminished kapha. Many other practices can be given for Vata too. Will share more at upcoming programs. Did you get first two chapters of my Ayurveda book? Christine's book is always a great reference for women's issues. Don't forget also to see Alternatives to Surgery by Sandra McLanahan, MD there at Yogaville. Might drop in on her for other ideas too. This would make a great topic for paper for anyone without a topic. Namaste

**Question #3:** I have a student that has scoliosis. It is an "S" curve. She has a right convexity thoracic curve of 10 degrees on the tool which is 30 degrees correct? The lumbar goes to the left with 5 degrees on our tool which would be 15 degrees - correct?

**Answer:** Active people change to 2x reading; inactive are 3 xs.

Q 2 - Is the lumbar curve compensating for the high thoracic curve?

A - yes

Q 3 - She almost seem to have a little bit of a lordosis too. Can a person have an "S" curve with a lordosis? Could the lordosis be compensating as well?

A - Yes is possible. Lordosis needs to be assessed by viewing whole body from side. If that is excessive then compensation might be for example leaning forward.

Q 4 - What poses do you recommend for an "S" curve? She has the SI joint immobilization so I gave her those exercises along with poses to strengthen the gluteus maximus and the deep 6. I gave her exercises for the thoracic region - stick with shoulder flexion and extension, Parsvottanasana, cat bows to strengthen the right side and intercostal breathing and meditation. So 6 poses, 1 breathing and meditation. I did not give anything for the left lumbar curve because I thought that it was enough. What do you think?

A - In general as I mentioned in presentation on scoliosis, I work more on lumbar curve at firs less on thoracic unless there are more active symptoms of pain there. Usually discomfort with double curve clients is focused on lower body. So stick to strengthening hips and getting clear assessment of all the hip ROM and MT proceeding to build those up those MT especially to above normal level and to get ROM to normal.

August 6, 2004 Yoga Forum

**Question #4:** The second concern is SI Joints: Going to the right side in Utthita Trikonasana in great. Going to the left feels like the hip gets jammed & the femur gets stuck with no where to go, then comes the pain that runs down the side & back of left leg. Can this be the SI Joint or am I totally missing the signs? I'm stress to the students, keep the pelvic region level will help prevent these problems. Am I on the right track?

**Answer:** This pain sounds more like sciatica can come from s/i or nerve roots at spinal column, or due to injury of hamstrings. Best is a personal assessment to tell the difference. Keeping the pelvis level is more likely to cause more trouble. One needs to move from the hip sockets while keeping the upper torso neutral. Do not lean with the arms nor hold pelvis rigidly, both will cause trouble.

August 6, 2004

**Question # 5:** There are some unquestionable benefits from yoga, but in my case lower back pain and an annoying sciatica-like pain on my right buttock-hip have developed. I have noticed that the more I practiced it, the more my lower back felt strained. Pigeon pose was fine at the beginning, but now I have to stay away from it, because I am afraid of injuring more my right hip. I also had the misfortune of finding a teacher that wanted to give us a massage on our lower back while being in child pose: that did it! The pressure she exercised on our lower back seemed to open up my hips in a bad way.

Any experts among us who could say how to avoid yoga injuries especially for certain more challenging poses? How to recognize a good instructor from an incompetent one (despite appearances)? Do you actually know of a yoga book that describes what muscles are involved in each yoga pose?

**Answer:** Please see Mukunda Stile's book "Structural Yoga Therapy" for anatomy and descriptions of where the sensation of the poses should be felt. You are guided through a series of range of motion to identify weak and tight muscles. A qualified instructor can provide modifications or alternate poses so that injury does not occur and discomfort is reduced. If you would like to you may write to Mukunda on this forum under Mukunda's Q&A.

Low back pain and tight hamstrings often accompany one another. In general, forward folds can irritate sciatica due to the stretch placed on the nerve. A tight gluteal muscle (piriformis) can be released by a competent massage therapist, and is frequently the culprit in sciatic syndrome, if it is not caused by a disc condition in the lumbar spine.

I would recommend that you get a copy of Structural Yoga, do an analysis for yourself and practice the single joint mobility movements to free up the restrictions in the hip, buttock, legs and back. By training each joint to function effectively with single joint movements, more complicated whole body movements can be done with greater ease. Finally, it is your responsibility to practice asana within the comfort zone of your physical limitations. Pain, strain and injury do not serve you. Place your attention in your body and gradually move through the first boundary of resistance with appropriate breath work. Do not judge your yogasana on the outer form.

April 24, 2005

**Question #6:** I had a herniated disc seven months ago. I went to physical therapy for a few months. The pain didn't go away as time went on, so due to my anxiety, I would never sit. I'd just sit stand all day or lay down. I haven't even bent my back. So I've been standing for three months or so now.

The pain in my leg is gone unless I jump around. It will come back for a short amount of time, but then go away. According to my doctor, my disc should be healed. For the first time, I've been sitting down. I tried to sit on the floor today; my lower legs began to hurt. I don't know what to do.

What do you recommend?

**Answer:** First of all I would recommend you look at my Q & A websitehrrp:/www.yogaforums.com/ for more advice that was given previously. You can search there for herniated disc and also for sciatica symptoms. The main recommendation is to hydrate. As the disc is made of 80% water one with this condition is often chronically dehydrated. Just filling up your tank regularly, 1-2 quarts per day minimum only water can make a huge difference. In addition there are mild backbending poses like cobra and locust using only your hip muscles not arms while doing them that can help send nutrients to the disc. Individually tailored Structural Yoga Therapy can help too if you are near me or any of my graduates. namaste Mukunda

Q- I have another question. I'm confused totally now. Everybody tells me different things. Is it ok to bend your back forward? Some tell me it's ok to do that, and some tell me don't ever do that at all. My leg pain has been gone. I did a short bend, and now my foot is hurting again slightly. I'm not sure if that's cause of my disc or cause my back muscles have been injured.

A- The general teachings in therapeutic yoga, is to extend the spine before and during asana. That means in locust to move the legs away from the pelvis; in cobra to pull the rib cage away from pelvis. In both instances one is decompressing the lumbar spine and hopefully taking pressure off the nerve roots. Those

with herniated disc and sciatic symptoms are encouraged not to bend forwards in general.

Thee are rare instances where forward bend is therapeutic but to determine who is a candidate a personalized assessment of their range of motion and muscle strength will reveal what is beneficial and what is contraindicated. My experience is that those who recommend forward bending have not had the symptoms themselves and usually are told what to do from a misinformed teacher who they have faith in. Most yoga teachers do not understand anatomy and beyond that is required kinesiology in order to give personal Yoga Therapy. They are not taught therapeutics in teacher training only what is recommended if you suffer from specific conditions. This type of instruction is only generalized not therapeutic which must be adapted to the individual's uniqueness.

I would suggest to you that having done a short forward bend, the reason you are in pain is because all forward bends are contraindicated for you. You are too acute to be doing yoga classes but need personalized attention from someone who is more educated in Yoga Therapeutics. namaste Mukunda

**Question #7:** I have a student who has **sciatica** in her left hip. From closer observation, I notice that her left hip is considerably higher then her right hip and her right hip is twisted forward. Her spine is curved to compensate for hip height difference, and perhaps one disk is starting to think about bulging. (she does feel comfortable in child's pose). What do you recommend I do with her and is there anything/adjustments that I should do while teaching her in a general yoga class to help her condition? Many Thanks C

**Answer:** In general you want to do postures that improve her alignment in asana as this may help her **sciatica**. Also of course avoid contraindicated poses for **sciatica** – hamstring stretches and emphasize strength of the gluteal region (hip extensors more specifically) in poses such as locust and stretch of its antagonists, the hip flexors in poses such as the runner stretch or lunge. Giving extra relaxation exercises (such as child's pose) is also helpful as **sciatica** as a vata imbalance inhibits the ability to relax and sleep. Calming pranayama like the wave breath and concentrating on progressive relaxation is a must.

I will now address the answer to this more explicitly as you are in my Structural Yoga Therapy (SYT) certification course. At this point you have had only 2 of the 12 weekends required for certification; I think others will also benefit from hearing the full scope of this work. I want you to help you utilize my book and my skills more beneficially. Use me by all means, but overtime learn to use me to point to what you cannot get to from referring to my writings. I want you to utilize my response to see how you can utilize your powers of observation and discernment more acutely (being a Sherlock Holmes of body reading assessment) in making future assessments.

There are six levels of assessment information that can be utilized in making a thorough SYT set of recommendations for any given situation.

- 1 -You began this question well enough showing a closer observation thus utilizing bodyreading skills from chapter 12 of my book. By using this step alone you can create a helpful program of SYT. One solution to your question about what to do can be found in by using my book. It tell you what muscles are contracted making postural changes (see table 3 page 103), another chart shows therapeutic asanas for postural change (table 6, page 266). However this first level of SYT is not very precise.
- 2 The second step in the progression to more accurate SYT recommendations is to take and evaluate this body reading in a kinesiological manner. So that is what I will do next I will say the postural imbalances you identified in kinesiological language. For new readers kinesiology is a second level of anatomy studies applied to understanding what muscles are contracting to create movements. Left hip is elevated (thus a contraction of left quadratus lumborum & possibly psoas), right hip is internally rotated

(contracting gluteus medius anterior fibers and tensor fascia lata also some of the adductors which are internal rotators too); this implies that the left hip is externally rotated (contracting the gluteus maximus and deep 6 rotators anterior to it - among them is the piriformis infamous for causing **sciatica**). By considering the antagonists (opposing movers) of these contracted muscles you can discover what muscles are over stretched. A sample list of muscle antagonist pairs is located in table 4 page 122; and another chart shows what asanas strengthen and stretch what muscles (table 5 page 254-255). From this knowledge you can create a more precise set of recommendations that direct the student's awareness to feeling the stretch and strength where it is needed.

- 3 The last three steps go beyond the scope of my book covering information only given in my certification training. A step you left out, because you are new to this training, is to do a range of motion (ROM) assessment of the client either following the joint freeing series (JFS) as it is given in chapter 16 Anatomy and Mobility Assessment or through a detailed assessment by learning to use the goniometer (sold via my website bookstore) based on our SYT Examination Manual. This manual is available only to students in the training. This provides exact angles of ROM to be more precise than JFS assessment based on guessing the angles of motion. Either manner will tell you what muscles are tight. Then referring to the previously mentioned table 5 you can give yet more helpful recommendations.
- 4 Later on you will learn to do a physical therapy based form of muscle testing (MT), also detailed in your SYT Examination Manual, to determine how much a muscle is weakened. With these four assessments bodyreading, kinesiology understanding, ROM, and MT then you can utilize your thinking more clearly in giving accurate Structural Yoga Therapy recommendations.
- 5 You can also give recommendations based on an understanding of the condition; in this case **sciatica** or you could look up that topic (www.yogaforums.com for the archives of such questions). **Sciatica** can be a mixture of three factors that compress the sciatic nerve from its roots at L4-S3 as a result of herniated or degenerated disc; a contraction of the nerve in the gluteals between the piriformis above and the obturator internus below; or tight hamstrings affecting the area where the nerve divides into its two components peroneal and tibial nerves. For this precision, the student will need to comprehend the scope of the full 2-year program. A more informed set of recommendations would take into consideration all five factors. In this way by understanding the specific muscles that are imbalanced with her unique **sciatica** condition can create a more personally tailored program, more pertinent to this woman.
- 6 An Ayurvedic assessment of the condition will also point out what of three approaches is best utilized in giving the above recommendations. This material is given out sparingly in this course until my book Ayurvedic Yoga Therapy is published (hopefully by the end of this year). Training in this method will be given May 16-21 in Zurich, Switzerland.

One also needs to keep in mind the guidelines from my first book, Yoga Sutras of Patanjali, as these guidelines help us to become clear on what is harmful and avoid all such movements that cause himsa (see YS II, 33-35), such as straight leg forward bend-s. These writings also reveal how we can guide ourselves and students through the progression of Classical Yoga training leading to freedom from all forms of pain and suffering.

**Question #8:** My question is: can **sciatica** be caused from a severe tilt of the pelvis, forward or backward? Or caused by anything other than a disc problem?

Also: I have pain located deep in the buttocks around the sit bones every time I do a standing forward bend, and most times in Triangle pose. I have had this pain for two years, so I bend my knees in a forward bend. The pain is in both the left and right buttock. Please help.

**Answer:** There are several causes of **sciatica** -- compression of the nerve roots in the sacral region (this can come from sacroiliac dysfunction in which the s/i does not symmetrically move upward upon hip

flexion) or from chronic dehydration quite common for over 35 year olds; or from pinching of the nerve pathway anywhere from the gluteal region (especially the pathway through piriformis and gemellus superior), or between the hamstrings. The major recommendations I have given include not to stretch the nerve (hence no forward bends with knees straight); but rather tone of the hip extensors (hamstrings and gluteus maximus with locust); and stretches of the adductors at their upper range where they also function as hip flexors (such as groin stretch in my book or modified pigeon). For sure be certain you are consistently hydrated, minimum of 8 glasses of 8 ounces per day for 3 months to relieve dehydration then keep it up for life.

**Question #9:** Have you helped anyone with **sciatica** during pregnancy? I have a friend who is in terrible pain. I'm a little familiar with therapy for **sciatica** in general, but in this case I'm confused. thank you! BP

Answer: This condition is nasty at any time but is especially so during last trimester of pregnancy. The general recommendations were covered in previous sends so I will not give but some summary here -- avoid prolonged sitting, move a lot: if you must drive distances then get out and walk frequently; avoid stretching the hamstrings instead stretch the front groin hip flexors and adductors; and strengthen the hamstrings with back bending such as locust, sunbird, dancer; and drink plenty (copious amounts) of water (not beverages), water. If these do not relieve it then bodywork, soft tissue manipulation, is helpful. There is a manipulation of the hip deep external rotators located in the lateral gluteals that works wonders. I have described it previously, can show if you catch me on my travels. namaste Mukunda

**Question #10:** I need your advice. My right hip (**sciatica** pain) has really been hurting. My whole right side is not as flexible as my left, and now my right side lower back is starting to burn. It hurts most when I lay flat on back, no bent knees, like Savasana. Is that a disk problem? Which exercise would you recommend from your book? Thanks so very much. Look forward to hearing from you. Sincerely, TC

**Answer:** With **sciatica** that is irritated vata (stress). Major need is to relax, eat and sleep consistently. Most common need is to strengthen the external hip rotators you can look in my book for examples of what does that I find doing sunbird with leg turning outward is often best way to do this. Gentle backbends like cobra and locust, which focus on strength and not stretch, can help. Also avoid contraindicated motions, which are all forward bends. Especially do not stretch hamstrings. For more chronic issues a colonic or enema may be helpful too. The seat of the problem is often colon issue -- diet irregularity, too much travel, or suppressed fear.

**Question #11:** I have two **sciatica** clients, in Denver, who I have been helping with Yoga Therapy for 2 months. I am writing to ask for your advice. They both have gained benefit from the Joint Freeing Series, hydrotherapy and Ayurvedic advice. However they both have had painful relapses recently and I thought you would know what to tell them as to what to expect for recovery time. Neither of them has patience and this of course is part of the syndrome. The man is Pitta with vata provocations (type A pushing). The woman is Vata with Pitta provocations. She always gets emotional when she is touched by any healer and is confused about why. I feel like her psychotherapist and know she is on a brink. Suggestions?

**Answer:** Find someone who approaches her more slowly, someone she trusts

**Question #12:** I wonder if you know any great literature that you recommend for **sciatica** clients, or literature that I can find on the net on successful treatments and strategies.

Not that I know, other that Richard Miller's article on sciatica. www.nondual.com

Answer: This condition often takes long term management. In about half the cases there is a cure and no more symptoms but then there does the other half need to be changing their protocols roughly seasonal. As a vata displaced condition, it is quite common for there to be a need for profound relaxation and change in life direction to relieve the deeper pushing of vata. When vata is displaced it is a force that is trying to change your thoughts, emotions, prana (all the koshas) into a life nurturing direction. Until that is clear there is pain and discomfort. Psychotherapy is often needed to get behind the emotional and mental fog that arises from the imbalance of vata and Pitta which will manifest as vata's memory loss and/or loss of pitta's discernment quality. Spiritual counseling and searching for the inner teacher is the deeper need however. Thus a psychotherapist doing sadhana can bring wonderful relief and support for the need of regular sadhana for these suffering clients.

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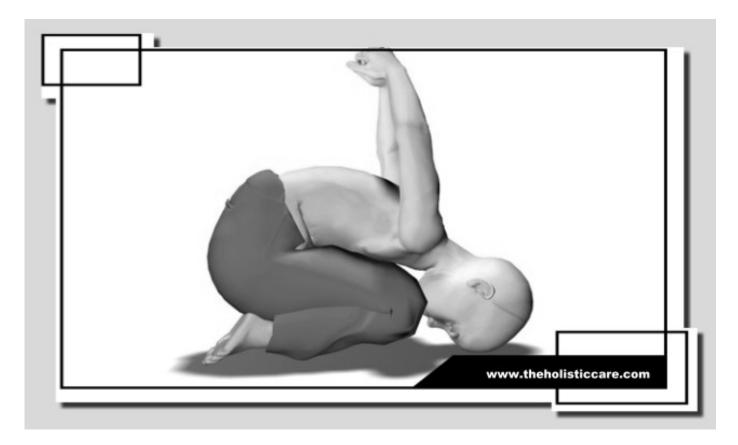
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Spine-health.com

# 9 - Appendix



#### **YOGA MUDRA**

#### **Benefits**

Yoga Mudra has a curative and corrective effect for the asthmatics. The lungs and their bronchial branches are stimulated in a very effective way. Because of reverse conditioning of the upper area of the body, the blood from the lower region begins to flow upwards and massages the veins of the lower bronchioles of the lungs. This helps restore the normal health of the lungs and their functioning. Yoga Mudra provides several other benefits also. It corrects the disorders of the spine; removes gastric troubles and constipation; strengthens the digestive system; and enhances sexual potentiality.

**YONI MUDRA** – can be done by sitting or laying down, placing your palms downward flat on your lower abdomen so that the thumbs align straight across, fingers together so that your forefingers touch, making a triangle in the space between your hands. The pelvic bones resemble the physical and energetic shape of the Yoni, a downward pointing

triangle. This is a foundation for connecting with your prana (life force) beneficial for energy balancing and self-healing. Tantra Lesson One – The energy body and Tantric practice

10 – <u>Biography</u> – Laura Defendini completed a 500 hr. Yoga Teacher yoga certification at Atmananda Yoga Center, NYC in 2005. Laura has been teaching Hatha, Vinyasa yoga in NYC and Pelham, NY. Laura's interest in Yoga Therapy began after working with a student who was injured during a vigorous yoga class. Laura began Yoga Therapy to help students and others with injuries and disabilities, using Yoga as a health and healing modality. Her focus is to teach with compassion and from the heart.