

Pregnancy and Sciatica

Structural Yoga Therapy

Boulder, CO

July 2006

RoseMarie Roth, RYT

Perfect Practice Yoga

Pittsboro, NC

Roseyyoga@bellsouth.net

I. CASE STUDY #1 - Gigi

A. INITIAL INTAKE

GIGI is a 30-year old student in my PreNatal Yoga class at a hospital-affiliated wellness center. She is beginning her fifth month of pregnancy. She begun attending my PreNatal Yoga class in her fourth month. She has been told by her OB-GYN that she may have sciatica – “likely nerve impingement” was the term used by her doctor.

Gigi has had episodes of low back discomfort since college when she “lifted something a little too heavy.” While attending college she competed on volleyball teams and “learned to work through pain.” In collegiate sports she sprained her ankles many times and experienced an injury to her left knee, but is vague about exactly what the injury was.

This expectant mother is very quite active physically at work and at home. She is happy being outdoors and gets “out of sorts” if she has to sit in a meeting or at the computer for more than an hour. She enjoys walking her dog when she is not working or otherwise busy. She exercises to a “yoga” DVD called “Fit Momma” which an exercise program incorporating yoga poses.

She has just completed her Masters degree and is employed as a Park Operations Technician, which requires strenuous physical activity such as repairing park trails. While she has modified and tried to cut back on the heavy-duty physical work, the work sounds very physically challenging.

She sees herself as very independent – “a person who doesn’t ask for help.” She perceives herself as a “calm person – not too excitable.” She has consulted a psychotherapist in adjusting to being pregnant and having to give up some activities and work challenges she enjoys. She does not like the idea of having to “give up anything” to be a mother and wishes to retain her sense of independence and level of customary activity. Gigi expresses impatience and annoyance at her close friend who is also pregnant. She finds it hard to tolerate her friend’s “preoccupation with the mommy stuff.”

Her current experience with back or sciatic discomfort is infrequent and a pain level of 2 on a scale of 0 to 5. The discomfort manifests itself as shooting pain down her right leg to the middle of the hamstring. She points to the piriformis as the originating site of the pain. She is concerned with the idea of being “incapacitated” by this problem later in her pregnancy.

She does not have a spiritual practice and does not participate in any religious organizations. While open to the mom and baby meditations that we do in class, she commented that she is not used to that kind of inner work. She sometimes “wonders whether she was doing it right.”

Gigi's goal is to find a way to prevent the sciatic discomforts from getting worse as her pregnancy progresses.

B. BODY READING

Front view:

Pronation of the ankles and the left kneecap has a slight external rotation. The palms rotate inward toward the thighs. Hips appear level. There is a very slight lift on her right shoulder. (Possible tight or weak muscles – see test measurements)

Side view:

There is some lordosis (which may be due entirely to the baby – having not seen her before pregnancy, I can't know). The thoracic spine appears somewhat flat. Head lines up normally with spine.

Back view:

Inner ankles slightly pronated, hips appear level, right shoulder ever so slightly raised. Head position normal.

SI test: Movement in both joints – normal

Table 1 – ROM Results

Range of Motion	Left 2/15	Right 2/15	Left 4/28	Right 4/28
Dorsiflexion	9	10	9	13
Plantar flexion	52	55	70	75
Eversion	20	20	10	10
Inversion	45	55	40	70
Knee Flexion	174	170	157*	164*
Knee Extension	0	0	0	0
Hip Flexion Straight Knee	71	71	60	61
External Hip Rotation	50	48	32	50
Internal Hip Rotation	24	35	21*	30*
Side Lying Hip Adduction	normal	normal		
Side Lying Hip Abduction	normal	normal		
Standing Knee Flexion	149	140	116	115
Standing Hip Extension	31	30	34	35

Table 2 – Muscle Testing Results

Muscle Testing	Left 2/15	Right 2/15	Left 4/28	Right 4/28
Dorsiflexion	4	4	4.5	5
Plantar Flexion	4	4	5	5
Eversion	4	5	3,5	4.5
Inversion	3	4	4	5
Hip Flexion	2.5*	3.5	2.5	3.5
Psoas Isolation	2.5	3		
Sartorius	2.5	3	3	4
Side lying	3	4	3.5	4
Hip External Rotators				
Hip Internal Rotators	4	3.5	4	4
Hip Abductors	5	5	5	5
Hip Adductors	4	4	4	4
Standing				
Knee Extension	5	5	5	5
Knee Flexion	2	4	3	4
Gluteus Maximus isolations	4	5	4	5

C. SUMMARY OF FINDINGS

Muscles to strengthen:

Left & Right psoas

Left & Right sartorius

Left hamstring and gastrocnemius.

Muscles to stretch:

Left anterior tibialis

Left internal rotators

Left hamstrings.

D. Recommendations from Initial Session

January 2006 - 5th month of pregnancy

Practice wave breathing upon waking in the morning

Perform the SI stabilizing sequence before the other movements – repeat it 6 times building to 12 repetitions

Perform the Joint Freeing Series in the morning and incorporate the wave breath. On #5 focus on moving onto the opposite hip and rotating the torso a little before moving the leg. (For example, lean onto right hip before moving left leg.)

Perform Toe Raises on the left leg to strengthen the left calf (gastrocnemius and soleus) muscles

Practice Vira I 3x - hold six to nine breaths

begin with left leg back

then right leg back

then end with left leg

NOTE: Be sure to lift up from the base of your belly to protect your lower back and then lift up out of the bottom ribs (if that is comfortable for you) making sure to drop the sitzbones downward (again for low back protection)

Practice Vrksasana 3x

Use a chair so that you can feel the sartorius muscle working

Do not take the bent knee beyond 45 degrees (to avoid piriformis irritation)

Start with the right leg lifted, then do the left, repeat with the right

End your asana practice with dog pose on a chair or extended child's pose followed by a several minutes of wave breathing and then a brief svasana

Practice this sequence 4 days a week working as mindfully and slowly and focusing on moving your breath as well as your body.

Drink lots of water to keep the discs of the spine hydrated.

I also recommended two books about pregnancy and child birth: [Birth from Within](#) by Pam England and Rob Horwitz and [Ina May's Guide to Childbirth](#) by Ina May Gaskin

Rationale for recommendations

Wave breathing will help Gigi to relax and enable her to transition more comfortably into her new role of expectant mother.

The SI stabilizer is used to correct instability of the SI joint and even though Gigi's joint tested normal, I gave it to her with these initial recommendations because she had the diagnosis of sciatica from her physician.

At the *anamayakosha* level, the JFS will take each joint through its range of motion, providing a relaxing movement practice to decrease *vatta* as well as to help strengthen her left hamstring and gastrocs and stretch her anterior tibialis.

At the *pranamayakosha*, the JFS works to release the *prana* for freer flow.

E. Results of Recommendations

February 2006 - 6th month of pregnancy

Gigi continues to attend my weekly PreNatal Yoga class. She has had some questions about details of the JFS, and we have resolved those in class. I purposely use part of the JFS for a warm up for the class so that Gigi can refine her understanding of the movements. I also taught the SI stabilizer in class since both Gigi and another student are dealing with sciatic symptoms.

She still feels unsure of certain movements, but gets clearer about them each time she practices. She tries to take time for svasana once a day. She finds the wave breath calming and tries to remember to practice it before bed but doesn't always "get around to that."

MARCH 5 - 7th month of pregnancy

Because spring flowering is well underway here Gigi is very uncomfortable with allergy symptoms. She is always congested. This makes sleeping difficult. She is not taking any medication for her allergies. Allergies, with congestion, are symptomatic of increased or unbalanced Kapha.

She is feeling confident about the sciatica discomfort not becoming acute. Even though she is further along in her pregnancy she would like a more "active" movement practice and less therapeutic practice to work with at home.

Instructions for Recommended Program

Wave breathing in Virasana :

Seated with a block or blanket under the sits bones for comfort

Use this posture as in aid in preventing sciatica

(***Note:** the following two recommendations are the position used for the Psoas Isolation Muscle Testing Procedure in the Structural Yoga Therapy Examination Manual (Stiles p. 32).

JFS modifications

Lean back on the hands as needed to accommodate the increase in the size of the abdomen and the baby.

Supine position with torso supported on elbows to strengthen psoas

Use bolsters or cushions to raise the torso because past the 3rd or 4th month of pregnancy because all back-lying poses are contraindicated

Turn right leg out to 45 degrees – on an inhalation lift the right leg slowly upward

Exhaling release - repeat on the left side

Start with 6 repetitions – build to 9

Supine with torso supported by elbows for strengthening the Rectus Femoris

Lift extended right leg up on an inhalation and lower on the exhalation

Repeat on the left side

Start with 4 repetitions on the left and 6 repetitions on the right

Build to 6 on left and 9 on right

A Suggested Vinyasana: connect these movements in a flow if you'd like for an energetic practice, but remember to move mindfully and with breath – don't let your body become heated and avoid getting fatigued.

Warm up:

Dandasana Leaning back onto your hands which are placed a few inches behind you.

Move to BADDHA KONASANA

- 3 ROUNDS OF BREATH WARMER WITH BENT KNEES

Tadasana to arms overhead to a slight back bend to swan dive forward until your back is parallel to the floor - then rise up with the inbreath keeping the arms out to the sides of your body to support your back during the lifting of the torso

Vinyasana

1. VRKSANA

Right leg bent first – left leg – then right again

Do not take the bent knee to 90 degrees (to protect piriformis)

Take bent knee to 45 degrees or less

2., ADHO MUKA SVANASANA

3. VIRA I (TO STRENGTHEN HAMSTRING AND GASTROC ON LEFT) Right leg back, left leg back, right leg back

4. PARVOTTANASANA only to back parallel with the floor

5. ADHO MUKA SVANASANA TO LUNGE POSITION WITH HANDS PLACED ON A CHAIR SEAT (To make the pose safer and less strenuous)

6. EXTENDED CHILD'S POSE

7. SVASANA FOR A FEW MOMENTS

Safety suggestion: Make sure a chair is within arm's reach to help with balance and stability for the standing poses.

Modified pranayama position to help alleviate congestion due to allergies

Arrange yourself in the lifted torso position that I used to do your range of motion testing on the massage table (using bolsters, very firm pillows or cushions to elevate your torso –try at least a 12 height – and then place a pillow on the bolster or cushions to rest your head on – you can lay with the legs extended straight out in front of you or you can bring the soles of the feet together in Baddha Konasana (butterfly pose).

Practice the wave breath with Oujai Pranayama (gentle Darth Vader breath)

Practice in this position for 5 minutes with this pranayama (allow the breathing technique to be easy and very comfortable – not forced in any way) and then 10 minutes more just relaxing

This will open your chest for a little bit deeper and easier breathing.

Adjust your props (cushion supports) so there is no low back discomfort

This is a great “restorative” posture before bedtime

Take a “Mother’s Meditation” time-out more often now. During this time in your pregnancy it’s time to begin connecting frequently with your baby. Make a conscious effort throughout the day to go inside, sense your baby, try to discern what might be going on with it – and enjoy that time – make it special for yourself – even if it’s just for 2 or 3 minutes.

Rational for Modified Recommendations:

Sitting in Virasana is recommended by the Bihar School of Yoga as the only meditative posture for sciatica (Swami Satyanda Sarawati p. 80)

Supported supine Baddha Konasana to help with allergy symptoms and as a restorative. ("Giving extra relaxation exercises is also helpful as sciatica as a vata imbalance inhibits the ability to relax and sleep. Calming pranayama like the wave breath...is a must." www.yogaforums Q. and A. April 24, 2005).

I gave the following Vinyasana sequence to Gigi to meet her request for a more energetic practice.

Dandansana leaning back on hands to open the chest for fuller breathing and relief of chest congestion

Baddha Konasana to strengthen sartorius and gluteus medius as well as to tone the muscles of the pelvic floor for delivery

Standing Breath Warmer to coordinate wave breathing with energetic body movement in a flow for increasing prana

Vrksasana to strengthen the adductors of the straight leg and the external rotators and to help build focus and concentration for labor and delivery

Adho Muka Svanasana to stretch tight hamstrings along with entire spine for comfort and to take the baby "off the mother's back"

Virahbadrasana I to help build stamina

Parvsvottanasana to stretch hamstrings, psoas, and adductors

Runners Position modified to strengthen the rectus femoris of the forward leg and stretch the hamstring and gastrocnemius of the back leg

Balasana with knees open wide and big toes touching, arms forward and fully extended to open the rib cage to promote full, free breathing in the front, back, and side body

SI stabilization exercise was omitted since it should not be used if there are no symptoms

F. SUMMARY OF RECOMMENDATIONS:

April 2006 - 8th month of pregnancy

Gigi feels physically comfortable, her allergy symptoms have greatly decreased, work responsibilities are lighter, and she has had no episodes of sciatic discomfort. She seems excited about the birth of her baby. She says her husband is now very enthusiastically awaiting its birth.

The findings from this second set of measurements shows a decrease in ROM and are counter to understandings about joint laxity in pregnant women due to increased levels of the hormone relaxin. In general ROM in joints increases as a result of relaxin release. However, a study presented at the North American Congress on Biomechanics points out that ROM measurements may decrease in the latter part of pregnancy due to the increased bulk of the abdomen.

In an article in the Scandanavian journal Acta Obstetricia et Gynecologica, it was noted that, "During pregnancy, apposition of body segments and changes in trunk mobility and motion control due to increased mass and dimensions may reduce the functional range of motion of the trunk segments." Some of Gigi's ROM measurements in her 8th month of pregnancy correspond to this and the previous mentioned article.

Once Gigi began her program of stretching and breath work she had less discomfort as well as less anxiety about the possibility of becoming debilitated by sciatica. During the latter part of her pregnancy there were no episodes at all.

According to Aadil Palkivala of Yoga Centers in Seattle, WA, the only *vayu* that changes significantly during pregnancy is *apana*. In the first trimester *apana* lifts to prevent miscarriage. In the second trimester *udana* and *apana* are balanced. *Samana* does not change that much during pregnancy. However, during third trimester *apana* increases and in the last month of pregnancy the *pranic* movement is all *apana*.

Uma Dinsmore-Tuli's soon to be published book Mother's Breath, provides detailed information on pranayama practices best suited to pregnancy. Uma states, 'My observation is that whilst the other pranas don't undergo much of an lateration during pregnancy, it is important to know that *apana* is the controlling prana for childbirth, and that it is worth getting in contact with an embodied understanding of this during pregnancy in preparation for childbirth.'

In Gigi's case there was likely a return home of *apana prana*. The structural work of her and SYT recommendations worked at the *anamayakosha* and the breathing practices at the *pranamayakhosa*.. However, some of the improvements in her sciatic symptoms

and emotional adjustment to pregnancy could have been influenced by the normal pattern of downward movement of *apana prana* during the latter months of her pregnancy.

II. NAME AND DESCRIPTION OF CONDITION

A. Sciatica during pregnancy

"Pregnancy places unique stresses on weight bearing joints in the torso. All the weight of the upper torso rests on the SI joint. Furthermore, as a woman's pregnancy progresses, her uterus enlarges, moving her center of gravity forward of her feet. This causes her to rotate her rib cage posteriorly, shifting her weight to the lumbosacral joint and the sacroiliac joints in the pelvis" ("Massage Today").

The mother's spinal curvature alters with the growth of the baby. This often creates lordosis and can contribute to the onset of sciatica. Yoga therapist Gary Kraftsow says that problems in the sacral area, hips, and knees show a lack of "functional integration" between the lumbo-sacral spine, the pelvis and the legs (185). In addition the hormonal changes during pregnancy loosen SI joint creating risk.

An article in Midwifery Today titled "The Sacroiliac Joint: A Major Cause of Backache in Pregnancy," Tenna Wicks says that 40 per cent of women may experience moderate problems with the SI joint after the sixth month of pregnancy. Women describe "a sharp, grabbing pain at one side of the sacrum or a pain across the entire low back that may even wend vaguely down the leg" For some women it can be totally debilitating. The onset of sciatic pain in pregnancy can be triggered by simple movements such as rolling over in bed, stepping off a curb, or walking on an uneven surface.

The sacroiliac joint is the junction between the sacrum and the ilium. Wicks describes the sacral area and its movement as follows: "The sacrum is mated with an ilium on either side, the "mountains" of the sacrum fitting right into the "valleys" of the ilium. As we take a step, the ilium should glide downward, rotating under and forward slightly. As the ilium moves, the sacrum does, too. The top of the sacrum pivots backward. There is just a little bit of measurable motion of the sacrum and of the ilium; it even could be described as an easing, or give. A pregnant woman's amount of movement that she had prenatally will increase slightly. If she had the typical 2-4 mm amount of movement, it may now have 3-6 mm. If, however, there has been a compressive incident in childhood or during a previous labor and delivery, perhaps only one ilium moves. Now there is a biomechanical problem and an asymmetry of motion. The immovable side grips the sacrum so that neither the ilium nor the sacrum moves on that side, and in fact, on the side of the moving ilium, the sacral motion is also restricted. This is why the normally moving sacroiliac joint may be the site of the sharp pain."

In Structural Yoga Therapy training Mukunda Stiles identifies three levels of sciatic pain. When the pain may be isolated in the buttocks it is referred to as level 1. Pain radiating into the thigh this is level 2. If it reaches the calf it is level 3, and reaching to the foot is level 4.

Diagnosis and treatment of sacral instability is important. The following instructions for Sacroiliac Stabilization Exercise are taken from Structural Yoga Therapy Examination Manual by Mukunda Stiles:

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 the left foot is adjacent to the right knee. If you are still 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. This should not be done with the knee in pain.

The first movement is to pelvic tilt back and froth 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 for until you feel the motion become 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 part of the series is to place your hand on the top of the left thigh near the groin and use it to move into internal hip rotation 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 12 times, then reverse your legs and repeat.

B. GROSS AND SUBTLE BODY SYMPTOMS

The SI joint is at more risk for instability in women and especially so during pregnancy when hormones are released which relax ligaments and tendons.

While men have 3 ligaments holding the SI joint in place, women have just 2 ligaments to allow for movement during childbirth. The SI joint loosens during pregnancy so the coccyx can move out of the ways as the baby is born. The joints expand from side to side and also make a pivoting action adapting the size of the pelvic area to the shape of a baby's head while it passes into the birth canal (Balaskis p. 30).

C. RELATED CHALLENGES

Pregnancy

Foods and eating habits can be a source of disharmony during pregnancy. In my experience teaching PreNatal classes, there is a tendency for women in classes to have vatta predominance. This may have to do with diet and definitely with culture. At the end of work day, many expectant moms tell me they are just too exhausted to take prepare a meal. So fast foods or prepared foods are a convenient way to end the work day.

The kind of foods consumed may not satisfy or meet the physical demands of pregnancy. There is likely much less nutritional value to them and no love put into their

preparation. According to Robert Svobda, “Fast foods aggravate vata” (p. 45 The Secret of Ayurveda).

Svoboda also states that a woman who lives in a vata predominant culture and eats a diet which increases vata such as fast foods, at conception is likely to have an excess of vata (“vitiation?”) even if her predominant dosha is pitta or kapha. The predominance of vata contaminating her constitution and predetermining a vata constitution of her offspring. In this way it could be understood that the culture the mother lives in is a strong determiner of the doshas of her children. (p. 45 “The Hidden Secret of Ayurveda”).

III. AYURVEDIC ASSESSMENT

Gigi appears to be *Kapha* dominant but the *pitta* dosha manifests in her quick comments and enthusiasm for life. Her body is of a *kapha* constitution with tree-trunk legs. She has broad shoulders and a strong back. She looks physically dense like a *kapha*. She is methodical and organized in her approach to her work with me, having a tidy agenda notebook. She often arrives to class early and spends time organizing her equipment and work space for the class.

Sciatica is a *vata* condition. Since back discomforts and problems are directly related to emotional discomforts, it is feasible to consider Gigi’s adjustment to pregnancy as the source of her sciatic discomfort.

Having been extremely physically active all her life and working a job that requires unusual strength and activity level, a sense of resentment began to surface about what she perceived as a loss of “independence.”

During the first few months of pregnancy the nausea and tiredness proved hard to ignore, but she worked “through the tiredness” refusing to “give in to it” and did not want to take time to rest. At work it was difficult for her to accept offers of help from co-workers to “lighten up” her physical work load.

It was during the first few months of pregnancy that the sciatic discomfort began. There were clearly feelings of loss and resentment during the early months of her pregnancy. To help her emotional adjustment she needed to feel that her sense of independence was not being permanently altered. The few weeks she attended counseling with a psychotherapist seemed beneficial in that she was able to outwardly express those feelings.

While not being comfortable incorporating meditation or spiritual reading or practice into her life, she did begin, outside of yoga class, to take brief moments of connecting to her baby now and then. And through those brief moments of connection became more sensitive to her physical changes and limitations.

The teaching of yoga can be used to “...remind students of their true calling in life, the call of love. We must teach asanas only in a manner that assists our students on

this essential quest" (Fire of Love p. 152). To that end, I devote the beginning and end of PreNatal Yoga class time to meditations and moments during which the mothers are invited to connect with their baby. During the practice of asanas I remind the mothers to be mindful of their and their baby's level of comfort. These practices time may have factored in to Gigi's shift toward acceptance.

I also advised her to read Birthing from Within by Pam England and Rob Horowitz to inspire her to connect more deeply with herself, her pregnancy, and her baby. This book is a practical guide through the emotion and physiology of changes during pregnancy as well a tutorial for labor and birth.

Another book I recommended was Ina May's Guide to Childbirth by Ina May Gaskin. As a practical guide this book helps a woman not only learn about her body but more importantly her ability to give birth. It is effective in helping women see labor and birth from a spiritual and sexual perspective.

Pregnancy is said to be the greatest physical change that a human can ever undergo. Pregnancy is a great preparer for parenting. The physical transformation is a reminder that a woman and her life style are being radically transformed. During pregnancy a woman must adapt to the obvious changes in her body, sleep patterns, emotions, career or educational plans, as well as physical endeavors. Pregnancy can bring about changes in the ego-self as well.

A woman's accommodation to these vast physical and emotional changes in her life during pregnancy can help her prepare at a deep psychological level for the lack of control that will be part of her experiences as a parent. Pregnancy can be seen as psychological and emotional transformation from singular personhood to motherhood.

The Yoga Sutras of Patanjali tell us that one of the causes of suffering is "ignorance of your True Self and the value of spirituality; egoism and its self-centeredness, attachment to pleasure; aversion to pain..." (interpreted by Mukunda Stiles p. 16).

As Gigi passed through the last trimester of her pregnancy, she seemed to have navigated through the territory of singular personhood toward the role of motherhood with some success.

IV. CONTRAINDICATED YOGA PRACTICES

During pregnancy many modifications are necessary for comfort as well as safety. Yoga classes should be of a gentle nature and a slower pace. At the physical level this prevents the build up excessive internal heat. At the energetic level it helps the mother to stay connected to her inner sensations and stay sensitive to her baby. Prenatal yoga students should avoid any pose or movement that is uncomfortable for them.

The following list of contraindicated practices during pregnancy is taken from Uma Dinsmore-Tule of the UK in her new book titled Mother's Breath:

DON'Ts

- Don't practice inverted postures
- Don't jump from pose to pose
- Don't be tough on yourself - and don't hold any poses for more than 5 breaths
- Don't over stretch
- Don't hold your breath or practice bhasrika, kapalabhati or any vigorous pumping breaths
- Don't fold forwards if it feel awkward
- Don't rest on your front
- Don't lie on your back after 30 weeks
- Don't twist deeply
- Don't rush practice
- Don't maintain a lifted mulabandha for longer than a single breath.

A. ADDITIONAL MODIFICATIONS

Tadasana is modified with feet a little wider than hips after the first trimester.

In standing poses the distance of the feet from one another is less than normal (i.e. in Trikonasana feet would be closer than the customary measurement of one leg length's distance). The shorter stance provides more stability while standing and requires less strength.

For standing poses a chair should be within reach for balance and safety issues after the first trimester (and in the first trimester if there is dizziness or nausea)

No closed twists

Avoid building up body heat during asana practice

Lie on the left side for Svasana with a blanket or pillow placed between the knees

V. GENERAL RECOMMENDATION FOR THE CONDITIONS

A. Therapeutic/free of pain

In order to relieve acute symptoms complete rest in bed can be the first step to recovery, but only for a day or two according to Pete Egoscue in his book [Pain Free: A Revolutionary Method for Stopping Chronic Pain](#). "Bed rest will limit the muscular demands that are moving the disk or bone into contact with the nerves" (p.118).

Once the acute pain stage is past, Egoscue says the "go after the muscles, not the spine." While some back pain is caused by damage to the spine or its components.....most active back pain is the result of ongoing muscular action and/or inaction. Egoscue says that stopping to that dysfunctional muscular activity will allow the pain to subside.

B. Stabilize situation and lifestyle change recommendations

Dysfunctional muscular activity could include prolonged periods of sitting or standing, over exercising or under activity. Misalignment during movement can also contribute to dysfunctional muscular activity.

Sleeping positions can contribute to sciatica and back pain. Sleeping on the stomach is to be avoided because it can exaggerate spinal curves. It can be helpful to place a pillow in between the knees when sleeping on the side. (This is especially important for pregnant women to maintain comfort and to stabilize the sacrum.)

Once acute symptoms of back pain subside a therapeutic program can be started. A therapeutic program should include increasing circulation to the joint, strengthening muscles around the area of injury/pain, and releasing or stretching tight muscles. All of these therapeutic approaches are incorporated into the Joint Freeing Series developed by Mukunda Stiles. The JFS is similar to the Pawanmuktasana anti-rheumatic set of movements from the Bihar School of Yoga and can be found in Asana Pranayama Mudra and Bhandas.

C. Maintenance and long term considerations

During the practice of yoga asana one should cultivate a relaxed attitude in both mind and body. Performing the movements of poses of yoga with wave breathing is recommended by Mukunda Stiles to balance the displacement of vatta. (The wave breath is breathing in and out through the nostrils with comfortable and steady rhythm. Upon the inhalation the chest should expand as the breath moves down like a wave into the region of the navel. On the exhalation the abdomen releases backward and slightly upward as the wave returns to the upper body.)

Other maintenance considerations would be drinking more water. Discs are made of 80% water, and, therefore, it is very important to increase water intake to help prevent as well as heal back problems. During the third trimester once water retention and the resulting swelling begins, some pregnant women will decrease their water intake which is counter indicated during pregnancy. This is especially true during the last trimester as the body tries to build extra fluid volume needed for delivery of the baby.

Setting aside time for extra rest is extremely important. Svasana after lunch and in the evening nourishes both the mother and child. Unfortunately, these recommendations for extra rest are often ignored by pregnant women who feel they have far more to do than there is time for.

Yoga nidra is recommended to help a mother get more in tune with her body and her baby and to connect her with her own inner light.

VI. QUESTIONS AND ANSWERS FROM YOGAFORUMS

Low Back Pain - Posted Apr. 27, 2002

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 pack 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 on 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 rotation 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 the muscles affect the sacroiliac and mobilizing them promotes a wave of circulation and energy to the lumbar sacral region.

Sciatica – Apr 24, 2005

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

A. 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's 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.

Sciatica and psoas stretch - Posted: Sun Oct 09, 2005

Q. If I can not get my sciatica client to stretch the psoas in lunge, what do you suggest?
:

A. Opening the lunge sideways usually goes there. If not doing one leg to chest lying on back then extending the knee until it releases groin. (essentially lunge lying on back.) Just stretching the adductors and quads will have a releasing quality to the psoas; even if that is not what he feels those muscles are nonetheless the protectors of the psoas.

Stress, effects on all 5 koshas – Sat Apr, 16, 2005

Q. Mukunda,

In the years you have been working with clients, how have you seen stress redefine itself in our society? In addition to the Anemia, Pranamaya, and Manomays koshas, has stress spread to encompass Vijnanamaya and Anandamaya as well? Or has it always been affecting all 5?

If it has been affecting all five, where do you believe stress manifest itself first?

With great respect and love,

A. For those unfamiliar with the concept of our multidimensional anatomy, the koshas, refer to Structural Yoga Therapy, chapter 6.

Stress has not changed. The ways in which we respond to it have changed. There are many studies on the changing of epidemics, heart disease, cancer, and more recently environmental toxicity. When one looks at ancient medical texts death came much earlier and often due to traumas from wars and the malnutrition brought on by loss of crops during wartime.

The two subtlest koshas vijnana and ananda are indicators of spiritual stress, not being connected to wisdom and higher power. Much of our wisdom has needed to survive the test of time thus we seek wisdom from those texts that are highly revered for thousands of years. That which is available as contemporary insights would rarely survive such a test. We need the help of a thorough investigation into this human condition and what has been of help in the past. By seeking historical ways of dealing with stress we can see how wise people of our era have adapted these teachings for this modern life.

In looking at Classical Yoga of the Yoga Sutras II, 4 we see that Patanjali viewed all stress as originating from avidya, ignorance which is the fourth kosha. When we disidentify ourself to be merely our physical body we tend to not listen to messages that come from a subtler level. Then there are others who are more "in their heads" who do not listen to messages coming from a grosser kosha. So it depends on where you conceive yourself to live that is the source of your perspective of stress. namaste

Conception and Pregnancy – Thursday Oct 17, 2002

Q. Dear Mukunda,

I have a student who is trying to conceive and is concerned about continuing her yoga practice, as she has been unsuccessful for some time in her efforts to get pregnant. She has asked me for suggestions about specific poses that would be helpful or that may be counterproductive. I would appreciate your suggestions regarding poses that she should incorporate or avoid. She does Asana practice regularly and her practice is not very strenuous. She is in good health. She is about 30, has a healthy lifestyle (strict vegetarian) and her body weight is healthy also. She was not raised in western culture (grew up in India) and has been in the states for about 10 years. This is an emotional issue for her and her husband and I would like to be able to give them suggestions that can help ease her mind about her Asana practice. Thank you for your guidance. I look forward to attending one of your workshops one day! Namaste

A. Mostly I would recommend that she and her husband do practices together. This would include asanas done alone and also partner poses, meditation done alone and seated facing each other. They should pray to God to ask if its God's will for them to have a child and also to ask the baby's soul to come into their lives. The compatibility of both partners needs to be emphasized rather than a practice just for the woman. Practices conducive to bringing in a soul are those that are kapha in nature, nurturing, soft, yet strong and building in stamina, those that feel juicy to the immune system and to the heart's juices also. They should avoid strongly challenging postures or those that are beyond natural range of motion. The practice would include breathing in and out together while doing practices. Also poses such as triangle, bridge, Shoulderstand mildly but held long, seated spinal twists, camel, child pose and fetal pose. The practice ideally will end with the Tantrik Asana yab-yum pose -- woman seated in husband's lap with a loving embrace and looking fondly into each other's heart through the eyeholes. This can be of benefit to all.

Post subject: Conception and Pregnancy – Mon Nov 18, 2002

Comment on fertility from a reader - A note to Jennifer, whose student is trying to conceive. I heartily recommend the book "Luna Yoga: Vital Fertility and Sexuality" by Adelheid Ohlig. The author cured herself of cervical cancer through yoga, herbs, meditation and fertility dances. The book focuses on all types of menstrual and fertility issues, includes recipes for teas and suggestions for food, as well as sequences for postures that couples can do together. A real gem. I'm sure that Jennifer, her student and that student's husband could benefit greatly.

Mukunda
Moderator

Post subject: Conception and Pregnancy

Thanks for remembering that book I also found it quite excellent for women to read. There is a lot to offer there. Also that it is edited and published by Susan Weed who gives many helpful suggestions from her Wise Woman Herbal wisdom, makes it invaluable.

Pregnancy – Sat April 27, 2002

Q. I have a pregnancy question for you - A student of mine who is 9 wks into her 3rd pregnancy had a few questions I would like your advice on - her previous pregnancies were normal - she is very lean and has always been physically active & fit - she has practiced yoga elsewhere for a few years - her concern is that with this pregnancy she has no energy, is constantly nauseous and feels terribly FAT (so early) - she says she feels so uncomfortable with her body (actually feels out of her body) - hasn't exercised at all with these feelings - she wanted poses to help with the nausea - My feeling was to have her stay in touch with her breath - she was part of my group yoga class the other evening - I tried to gear the class to poses she could do - we did a lot of 3 part breath -

slow mountain breaths leading up to vigorous breaths with squats - warrior 1 - (the rest of the class did an easy camel (w/chairs) - while she did easy lying down twists - we completed the class with fwd bends and a long Shavasana - - she said she felt wonderful after - I felt it was attributed to the breath (slow breaths) - I also suggested that she try walking daily (slowly) taking in her surroundings - she said that is hard for her to do - since she was so used to a fast paced schedule - What would you suggest she do for these symptoms?

Thanks K

Mukunda

Moderator

A. K - It sounds like you gave some good advice to her. For nausea I would definitely recommend she continue to do the wave breath breathing down on inhales until she can connect to here pelvic diaphragm and begin to move it upward on exhalations and downward on inhalations. Activating this muscle group can help or relax her and to promote better cranial sacral rhythm in her nervous system. This should be done with all asanas and even during walking though it will necessarily need to be a slow contemplative walk to achieve this result. The main poses to recommend would be gentle twists in sitting positions and mild backbends even camel or cobra to discharge the tensions around the thoracic diaphragm. Also give her the Yoni Mudra (hands in down facing triangle on abdomen) during relaxation for balancing energy in the vata lower abdominal region

Practices during pregnancy - Wed Mar 23, 2005

Q. my name is Boaz and I'm an Ashtanga yoga teacher in Israel. I read your book (Structural Yoga Therapy) and participated in some classes of Charlotte in New-Jersey and was impressed by both. I hope in the future to get better acquainted with your system, I see it is very important, since people do get injured in practice and others arrive to yoga with injuries.

I would like to ask your advice on 2 matters:

1. I have a student who is 3 months pregnant- is it problematic to do Kriyas and Bandhas? If yes at what stages of the pregnancy should she be more cautious? Are there any other things to be cautious about?

Mukunda

Moderator

A. after first trimester changes need to be made in program. no more uddiyana or kriyas. Most other practices need modification as time goes on, such as asanas that are strong back bends should be made milder or eliminated. The guidelines depend on whether student has been long term yogini or just starting with her pregnancy. The former has less restrictions the latter many more. The former should know what her body needs from experience of what they do to her. The latter needs to ask outside sensitivity which is always less than her own. Though in this case without training she is vulnerable and you need to protect her and baby. More details can be found in Nava Yogini Tantra

by Bihar School of Yoga is best for women. there are many other average yoga book with guides for pregnancy. namaste mukunda

Sciatica during pregnancy - Fri Jul 23, 2004

Q. Mukunda,

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

Mukunda

Moderator

A. 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 backhanding such as locust, sunburn, 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 gluteus that works wonders. I have described it previously, can show if you catch me on my travels.

Namaste Mukunda

Preparation for C-section - Jul 15, 2003

Q. I teach prenatal yoga. One of the gals in my class is about 14-16 weeks along, and knows that she will be having a C-section. I don't remember why this is... I believe that a previous pregnancy turned bad, and they had to do an emergency C-section to remove the baby before it was viable. Because of the way they cut her, there is no way that she can deliver vaginally. She has asked me if there are any exercises that she can do to prepare herself for a C-section. Obviously, in class, we do a lot of squatting and opening of the hips, inner thighs, and pelvic region. Any suggestions for her? Thank you so much for your time, and this invaluable service you provide. R

Mukunda

Moderator

A. It is a bit late for her to be doing abdominal strengthening. If she were asking the question in early first trimester the answer would be different. But at this point best is to

just give her extra tone in the entire region, which for me would be standard procedure for pregnancy. I would pay particular attention to both toning and stretching her psoas and other hip flexors plus the quadriceps. Poses to do this would include gomukhasana (legs only plus laying forward and backward); pigeon; some that are in my book include runner (both lifted and sinking), groin stretch, and the rolling bridge. Best wishes.

Pregnancy Yoga practices - Wed Mar 23, 2005

Q. Dear Mukunda:

I hope you are well. I have found out that I am recently pregnant. This was why I was not able to attend the Feb. training session in NY. Because of this, I would like the opportunity to start the training again come 2006. However, if my health is in order, I do plan to attend the sessions in NY, but pay you by the weekend. I hope you are understanding of this situation and will permit me this alternative means of studying your course material. I would still like to be kept on the mailing list for the NY group if that is ok.

On another note, I am wondering about the Joint Freeing Series (JFS), and if that would be good for me to do the length of my term. I understand that during pregnancy, your joints tend to soften as well as the surrounding tissues and ligaments and want to keep my body in the best shape possible.

Mukunda

Moderator

A. Definitely JFS is fine to do throughout pregnancy. Working sometimes for strength but mostly for circulation softer effort will serve you well. In general continue to do all pelvic opening you can especially would recommend the regular practice of the series called Optimizing Strength and Mobility chapter 17. That series is great for hip openings.

Do as long as you can in pregnancy and modify it as you near the third trimester.

Namaste Mukunda

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VIII. APPENDIX

Eval 1 Muscles Tests



Adapted Supine Test Position using two bolsters and a blanket

VIII. BIOGRAPHY

RoseMarie is certified in PreNatal Yoga and has been teaching PreNatal Yoga for over 6 years. She is the mother of three grown sons and draws on her experiences of pregnancy and parenting in teaching expectant mothers.

She is certified in Hatha Yoga based on the Iyengar methods, and has attended six teacher trainings with Aadil Palkhivala in Seattle, WA, to learn the Purna Yoga Method. She is also certified in Cardiac Yoga. In addition to teaching expectant mom's, she teaches Basic, Continuing and Yoga for Seniors at hospital-affiliated wellness centers in the Raleigh Durham and Chapel Hill areas of North Carolina.

She is currently enrolled in Structural Yoga Therapeutics Teacher Training with Mukunda Stiles and has attended yoga therapeutics workshops with Gary Kraftsow, Doug Keller, and Aadil Palkhivala.