Chronic Pain- Multiple Factors

Structural Yoga Therapy Case Study
London, UK- July 2007

Donna Lambert
Winchester, Hampshire, UK
+44 1962 864972
yogawinchester@btinternet.com
www.yogawinchester.co.uk

1. Case Study

A. S. is a 61 year old retired general nurse. Her zodiac sign is Scorpio which refers to the rectum and sex organs. She is twice divorced- both marriages were very unhappy, and both ex-husbands are still alive and "nasty". Since then she has lived under severe financial strain, and at times has been on benefit (money given to those unable to work, and who have no savings). She has three children; one is mentally ill (bi-polar and schizophrenic) and is often hospitalised. Her other children are not supportive of her and S. does not have much contact with them. Her mother and father both have Alzheimer's, and her mother died a few years ago. She has been the primary carer for her family.

Over the years S. has had three car accidents. The first one resulted in chest injuries and a swollen left leg, she also felt as if her ribs were "pulled off her sternum". In the second accident she was hit side on and knocked about, but the main thing she remembers is her husband being very angry with her. The third accident was in 2001 when she was going somewhere with a friend, and felt happy to be out because conditions at home were "terrifying". She hit a patch of ice and drove into a tree. She had chest pain and was in shock, but got her friend out of the car and helped her back to the road to wait for an ambulance. In all cases the cars were totalled, and in all cases she was examined by a doctor and given pain killers. She also had a horse riding accident in 2003 and fractured vertebrae T3, 4 and 5, although she only found this out years later. For this she was given painkillers and exercises by her GP. She has had "searing pain" in her lower back for years.

She has arthritis in her left big toe, her right big toe crosses over the next toe, and she tends to grip with both feet as she walks to stop herself falling over. She goes over on her right ankle periodically. Both knees are "clunky" and she has neck pain around vertebrae C7.

She says she feels she is constantly being judged by friends and family, and she suffers from "horrible people" who say "stop making a fuss, there's nothing wrong with you". She has been on anti-depressants and painkillers, but now refuses to take anything for the pain except an occasional alcoholic drink. Recently she deliberately took an overdose of an over the counter pain killer—she felt she had been abandoned by everyone she cared about. She spent time in intensive care, and was made to see a psychiatrist, but she mistrusts them because of problems in the past and says they only want to give her tablets.

She used to go to church on and off, however the last time she went she saw a psychiatrist she knows there, so she never went back. A family member is involved with her local church, so she will not go there. She says she believes in "something and in Christian values, but there are lots of hypocrites".

She is not having any medical treatment or other therapies, although she saw an osteopath for a while and felt that was helping. She is now waiting to see a specialist to try to confirm her GP's diagnosis of Ankylosing Spondylitis. She was coming to one of my yoga classes, but stopped because her GP told her to, and she was in so much pain. She does some walking, but falls over a lot, and feels frightened to be out on her own because of "things that have happened before". She has done a lot of volunteer work throughout her life, and currently volunteers at a hospital one day a week. In the past she did work such as digging fence posts, and feels she probably did too much when she was in pain.

She says she only sleeps 2-3 hours each night because of her pain, and keeps the radio on until 4 in the morning. She has a sleep in the afternoon for 2 hours or so. She says she eats regular, healthy meals, and gets an organic vegetable box every week even though she can't really afford it. The only time she feels better is if she keeps warm and doesn't move around- sometimes she stays in bed when it's cold.

She told me that when she first came to my yoga class, she was shocked because I looked just like a woman who had been horrible and judgemental to her in the past, and it took courage to stay in the class. But during the first class she realised I was nothing like that person, so she was able to stay and keep coming for a few months.

At one time she had a cat but it died, and she found that upsetting. A dog would mean too much walking, any pet would be a tie and S. is hoping to move away from to another region at some point.

Her goal is to be free of pain, and says she has hope and faith that I can help her. When she left after our first session, she told me she felt "buoyed up" by it, and was grateful that I had listened to her and not dismissed her pain as being in her head.

Every time she comes over, she brings me something lovely she has made: cake, jam, seedlings.

B. Physical assessment

The physical assessment was done over 2-3 sessions. The first session on 22 May 2007 included the intake interview, scoliosis and sacroiliac tests, and range of motion tests (ROM). S. is familiar with the Joint Freeing Series from class, so was happy to do a modified version. The most comfortable position for her is to be seated in a straight backed chair. I went through it with her seated in a chair, asking her to do each motion feather light, and only move to the point where there was no pain, with polishes for motions that cause pain. She is unable to move her spine at the moment, so I asked her to imagine the movements of cat stretch in a seated position.

The second session on 28 May 2007 included a further interview, the last few ROM tests, and what muscle tests were possible given S's level of pain. At that time we went through the wave breath and intercostal breathing, JFS polishes, the arthritis diet for her to have a look at, as well as some Yoga Sutras to read and let me know what she thinks: II 33, II 46-48.

Body Reading 22 May

Sits and stands erect
Feet turned out
Wears pressure bandages on both knees and wrists
Slightly forward head
No curve in thoracic area of back, area is concave
Head tilts to right
Left shoulder higher
Slightly larger space at side of body on left side
Carrying angle L12' R13' measured with the Goniometer
When feet are brought together her body lists to the left, and she feels as if she will fall over (she says when she "takes a tumble" she falls to the left)
She always looks well and smiling, dresses neatly and wears light makeup
SI: both sides move up very slightly (when doing SI test, lifting right leg is OK, but when she tries to lower the right leg there is pain in the front right hip and she has to step down hard)

Body Reading 28 May
Right arm forward, more space at waist on right side, right foot turned out
Palms reddish in colour, face pale
Scoliosis test: 4' curve measured on the scoliometer in lumbar from pelvis

Joint Action	ROM	1st Date	1st Date	2nd Date	2nd Date
	Norm°	Left	Right	Left	Right
ANKLE		**22/05/2007**	**22/05/2007**	**15/08/2007**	**15/08/2007**
Dorsiflexion	20°	*	*	20	20
Plantarflexion	50°	*	*	30	30
Eversion	20°	*	*	15	15
Inversion	45°	*	*	40	40
KNEE					
Extension	0°/180°	180	180	180	180
Flexion (Supine)	150°	123	123	130	130
HIP					
Flexion (Bent Knee)	135°	111	112	115 P3	95 P3
Flexion (Straight-Leg Raise)	90°	80	84	85	65 P3
External Rotation (Supine)	45°-60°	35	31	38	35
Internal Rotation (Supine)	35°	32	34	30	30
External Rotation (Prone)	45°-60°	X	X	45	50
Internal Rotation (Prone)	35°	X	X	45	30
Adduction (Side Lying)	30°-40°	Hip height	Hip height	X P2	X P2
Abduction (Side Lying)	45°	25	20	X P2	X P2
NECK					
Extension	55°	37		50	
Flexion	45°	20		45	
Lateral Flexion	45°	12	19	20	20
Rotation	70°	49	48	50	53
SHOULDER					
External Rotation	90°	20	50	50	50
Internal Rotation	80°	45	70	85	85
Flexion	180°	150	155	178	175
Extension	50°	25	25	35	30
ELBOW					
Extension	0°	0/180	173	0	0
Flexion	145°	126	128	130	136
WRIST					
Flexion	90°	39	39	*	*
Extension	80°	41	35	*	*
Radial Deviation	20°	16	11	*	*
Ulnar Deviation	30°	43	31	*	*

Notes 22 May 2007:
X= pain so no muscle test
1. Ankle ROM tests done by eye as client in pain- less that standard except inversion
2. Knee extension- can extend knee, but can't lie supine with hip and knee extended without pain, more pain on left side
3. Hip flexion straight leg raise- now OK to take left leg to floor, when testing right leg sharp pain in buttock past 84' ROM
4. Side lying hip adduction and abduction tests- lying on right side pain and pressure in right hip
5. Lower back "catches" when legs are straight and lowering toward floor

6. Unable to do prone hip external and internal rotation ROM tests as client in pain and could not lie prone and bend knees—prone knee flexion done later L 78 R 56
7. Experienced pins and needles in fingers while doing leg ROM tests
8. Shoulder external rotation on left-shooting pain in elbow, tingling in hand on right
9. Shoulder internal rotation- pain in elbow past 32/34' ROM
10. Shoulder flexion- pins and needles at inner left elbow after ROM test, and attachment of pectorals on clavicle "burn"
11. Felt numbness on top of foot above outer three toes when doing JFS #1
12. Pain in inner elbow when pronating left hand

Knee tests: L OK for knee draw and rotation
R rotation test- more movement when turning foot/ankle inwards but no pain. She sometimes gets pain in outer R knee

Notes 15 August 2007:

1. Constant burning numb pain *1-2 in R SI during all testing
2. Ankle eversion- arthritic pain in L big toe
3. Ankle inversion- pain *2 on right going towards standard ROM
4. Bent knee hip flexion *3 pain in R SI
5. Straight leg hip flexion *3 pain past 65' in R SI
6. No sidelying tests as too painful to get into position
7. * Wrist ROM tests done by eye- all about standard- no pain

Joint Action	1st Date Left, 1-5	1st Date Right, 1-5	2nd Date Left, 1-5	2nd Date Right, 1-5
ANKLE	**22/05/2007**	**22/05/2007**	**15/08/2007**	**15/08/2007**
Dorsiflexion	2.5	2	3	3
Plantarflexion	2.5	2	2.5	1.5 P
Eversion	X	X	2	1.5
Inversion	X	X	2	1.5
KNEE				
Extension	1	3	2	3
Flexion	1.5 P	2 P	1.5	2 P
HIP				
Trunk Flexion (Supine)	1.5		2	
Iliopsoas Isolation (Supine)	1	2	2	1
Sartorius Isolation (Supine)	X	X	1.5	2
External Rotation (Prone)	X	X	1.5	1
Internal Rotation (Prone)	X	X	1	1.5
NECK				
Extension	2		*	*
Flexion	2		*	*
Lateral Flexion	1	2	*	*
Rotation	2	2	*	*
SHOULDER				
Abduction	3	3		
Adduction	3	3		
External Rotation	X	X	2.5	1.5
Internal Rotation	X	X	2	1.5
Flexion	2	2		
Extension	X	X		
ELBOW				
Extension	2	1.5	3	2

Flexion	2	3	3	2
WRIST				
Flexion	X	X	3	1.5
Extension	X	X	3	1.5
Radial Deviation	X	X		
Ulnar Deviation	X	X		

Notes 22 May 2007:
X= pain so no muscle test
1. In most tests there was pain if client went towards standard ROM or tried to use muscle strongly P= then pain

1. Lying on back is painful in hips at first, then eases off and becomes pain in lower back
2. Right serratus sore, in lying position, with more pain when lifting something
3. Hip flexors and abs test- pain in SI at base of spine when any pressure is put on knees to give resistance.
4. Psoas MT on right- could not hold leg in test position
5. Sartorius MT- cannot get into test position- too much pain
6. Neck tests: felt she was digging her heels in to do neck extension MT
7. Lateral flexion to the left- felt pain in upper trapezius on right
8. Elbow extension- feels pull on clavicle
9. Shoulder flexion MT- used her back, when I asked her to use pectorals she said they were sore
10. Shoulder extension ROM and MT sharp pain after about 20'
11. Lying prone with arms at sides- pain in cap on shoulder on bone, pain in SI and coccyx—both feet strongly turned in

Notes 15 August 2007:
Constant burning numb pain *1-2 in R SI during all testing
Ankle plantar flexion- R hip pain *1-2
Knee flexion- *2 pain in R hip and SI
Trunk extension spinal erectors strength 3- pressure on mid thoracic causes some discomfort
No muscle testing done on neck as was towards end of session, but her mobility and strength has increased in her neck, and there is no pain when moving in standard ROM

C. Summary of Findings:

Tight	**Weak**	**Release**
Hip flexors	Brachioradialis	TFL
Hip External rotators	Tibialis Anterior	Upper Trapezius
Hip Internal rotators	Hip External rotators	Abdomen
Quadriceps	Hip Internal rotators	
Upper trapezius	Quadriceps	
SCM	Upper trapezius	
Triceps	SCM	
Biceps	Triceps	
	Biceps	

D. Recommendations

Sessions 1 and 2 Recommendations, 22 May and 28 May 2007
Because S. feels harshly judged by others, and judges herself, I want to connect her to her breath and encourage a sitting meditation with focus on breath, mantra or music, or something else that gives her pleasure. I will also encourage her to do the JFS without pushing past her pain threshold, as she has been doing in the past. I feel that she needs encouragement to feel better about herself, so will recommend loving kindness meditation when it seems appropriate. I want her to feel that she is in a safe, supportive environment and to understand that I will not dismiss her and her pain, no matter what the outcome of the case study.

In the first session I asked her to practice the JFS every day, sitting in a chair, focusing on breath and mobility, moving with feather light movements. I asked her not to go to her pain threshold, but stay well back, even if she felt she was not making much of a movement. I gave her sutras II 16, II 33, II 46-48 to read and ponder on.

In the second session I asked her to add some breathing awareness practice. When I asked her what relaxed and made her feel happy, she instantly replied "music". I asked her to sit in a comfortable straight backed chair and focus on the wave breath and intercostal breathing, while listening to a favourite piece of music for 5 to 10 minutes. She knew exactly the piece—a Native American CD.

Recommendations Session 3, 07 June 2007:
In this session we practiced the wave breath and belly breathing- breathing below the navel to relax the abdomen. Release of the belly can increase serotonin levels (anecdotal evidence discussed among students during SYT training). We went through some of the JFS to see where pain was felt, and visualised some movements such as #5, 6 and 7 as level 4 pain was felt right away. #14 was done with straight arms, as this gave no pain.
Vrksasana facing wall held for 3 breaths
SI test was possible if she lowered her leg in turnout.
Swaying hips side to side with bent knees for adductors/ abductors and QL.
She likes to sit in a chair with her feet turned in as she feels less pain in her lower back.
Pranayama for pain (see Appendix for more details). Lying down on a padded mat, covered with a soft blanket, she was not in pain, just uncomfortable. For half an hour I talked her through all 5 techniques, and she fell asleep during most of them. She woke herself up as "I didn't want to drool and snore". I said that didn't matter to me, I was happy she could sleep. I asked her to try 2 or 3 techniques over the next couple of weeks, and choose one or two she liked best. I asked her to do one technique if she had trouble going to sleep, then if she still couldn't sleep or she woke up, to try another one, then another one.

Recommendations Session 4, 26 June 2007:
In this session S. talked and I listened, asking a few questions to clarify some of her points. S. had had an appointment with a Rheumatologist on 21 June, and she told me she had "slammed her fist down on the doctors desk, I was so angry". S. had been asked to clarify the date of each accident and injury, which she was unable to do and the doctor referred to her as a nurse, although she is retired. The doctor also made reference to an MRI scan, which S. says she was never offered. S. admitted to the doctor that she smoked one cigarette a day (which she had not mentioned to me) and that she drinks a bit of vodka when things get too much for her. The doctor ordered blood tests and x-rays of her lower back, mid back and hands, and those were done the same day. S. doesn't know what the next step is, but she has decided

to start reintroducing medication slowly—paracetamol morning and night, glucosamine, and devil's claw--she said she told the doctor that's what she would be doing. S. was told that her blood pressure was higher than it should be, and that her erythrocyte sedimentation rate was high (The ESR is increased by any cause or focus of inflammation). S. says this has always been the case.

S. was comfortable enough with me to reveal a lot of personal information and stories of family trauma.

After about fifty minutes she seemed calmer and able to talk about what exercises she had been doing. I asked her not to do any activity or exercise that causes pain, especially opening her heavy patio door. She confirmed that this will be replaced in a few weeks, and I asked her to consider using the front door and walking round the back of the house in the meantime. I also asked her to try to incorporate loving kindness and compassion into her daily activities. It did not seem the right time to look at the lovingkindness meditation.

SI series- standing facing the wall, knees together, one knee bent. Bring foot forward, then back towards opposite knee, to feel internal then external rotation. S said this felt "tight" in the lower back, but not painful. 6 repetitions, to be increased to 12 if no pain is felt. (see Appendix for photos)

I asked her what she was reading, thinking about recommending some uplifting reading. She is reading the autobiography of a foreign correspondent, Kate Adie, who is quite inspirational and courageous. I had chosen a few books I thought she might be interested in, one of which was "The Tao of Pooh" by Benjamin Hoff. I suggested she might like to read this, and she listened to me explain what it was, then she said "I think I'll pass, the author of the Pooh stories was a horrible father, and treated his son very badly".

Recommendations Session 5, 03 July 2007:
S says she is feeling "very low and tearful". She spoke more about her daughter's illness, and doesn't know or won't say what her diagnosis is "I don't like labels". She is thinking of going back on anti-depressants. She is afraid of who will come to the door, members of her family, they might hurt her. I asked her if they would hurt her physically, and she said "I don't know". I asked "Are you afraid of what they might say to you?" and she replied "yes, they are very cruel". She always makes a face when she talks about them. She seemed to be feeling better, so I asked her to do some JFS with me, seated in a chair. I then asked her to try the SI series standing, (knees together, one knee bent) after which she got down on the floor and tried it, and said she didn't feel pain. I asked her to try it sitting in a chair, and she did this and again said she didn't feel pain in her back or hips. We also did JFS #5 standing and seated, turning the hip in its socket. I asked her to continue to do these every day or every other day.

Continue modified JFS every day or every other day

Sway hips from side to side, contracting gluteus medius on the lower side.
Sway hips in a circle to feel lightness and mobility in waist and hips

Modified salabhasana: lying prone, stretch one leg straight back without lifting it- it may come off the floor a bit. Alternate legs, focusing on hip extension, elongating lower and mid back, using gluteus maximus and hamstrings, and toning quadriceps.

Relaxation/ Meditation: Stay lying prone, deepen breath and relax shoulders and abdomen. Get very comfortable and use this as a meditation/relaxation position, since there is no pain. Imagine there is a small screen on your forehead, and you are watching the colours of the pain. Like a TV the screen has a knob, so first turn the knob and feel the pain a little more, then turn the knob and feel the pain lessen a little. Turn the knob a little lower, until the colour of the pain is softer. Visualise your fist holding the pain, clench the fist and hold the pain tight. Now release the fist slightly and let some of the pain seep out between the fingers, release the fist more and more until the pain seeps away. (I could see her fist clenching and unclenching, then she fell asleep and I let her stay there for 10 minutes).

Recommendations Session 6, 02 August 2007:
S spoke for 45 minutes about recent contact with "bad people" and her fears. I offered some suggestions of how to deal with these personal issues and recurring patterns.

We did all of the JFS together sitting in a chair. I reminded her to breathe and relax her shoulders, keeping them back and down, and not to "look for the pain". She told me there was no pain, just some discomfort in the mid/low back. She really seemed to be enjoying herself.

I asked her to continue to try to do the recommendations from last time:
Swaying hips, JFS seated in a chair, modified salabhasana stretching leg back, feeling length in the lower back (she asked "is it getting longer?" yes)

SI mobilisation: prone, knees hip width apart, bent up, move feet side to side like windshield wipers. Side to side, cross one ankle in front of the other alternately, open and close ankles. (see Appendix for photos)

Loving kindness meditation: I explained it and read it to her. We then repeated it together several times, to send it to ourselves.

May I be filled with lovingkindness
May I be well
May I be peaceful and at ease
May I be happy

I explained that first you send it to yourself, then to a friend, then to a 'neutral' person, then a difficult person, then all four, and then gradually to the entire universe. She did not want to try sending it to someone she didn't like, but she liked the idea of sending it to someone like George Bush.

I gave her 15 minutes relaxation at the end, reminding her to get comfortable, slow down the breath, ask your thoughts to come more slowly, and keep reviewing. She fell asleep for 10 minutes. After the session we had a cup of tea and a lighter chat.

Final Assessment and Recommendations Session 7, 15 August 2007:
This session was to make a second assessment of ROM and muscle testing.
We chatted as I tested her over 1 hour, and she stayed relaxed and comfortable on the table. She was very open to the testing (compared to her tenseness and holding in our first session) and said the only pain she experienced was a constant level 1-2 burning/numbness in her right SI, and a soreness in her inner elbows on both sides. She said she could not remember anything about our first sessions, what the pain level was, or how it differed from today. I encouraged her to observe and examine the changes in her body over the past three months, as there have been some big

improvements. It seems to me it is her mind set that has not changed much, and I encouraged her to do more relaxation, breathing, and considering of the sutras I gave her, along with sending loving kindness to herself.

SI assessment: L OK, R goes down slightly- pain in right low back
Scoliometer assessment: 4' curve to the left measured with the scoliometer tool from L5 to T7

Continue to practice as often as possible (every other day):
Wave breath
JFS
SI series: standing, seated, or prone windshield wiper legs, skier, swaying hips
Relaxation
Sutra II 33

I asked her to consider taking a JFS class I am considering giving. It would be 45 minutes long, and a short course, so would be a small commitment to make, and it would reinforce what we have done together in our sessions.
She said she will try to repeat the loving kindness mantra, even if she is unable to send it to herself or anyone else.
S has been on anti-depressants and painkillers for 6 weeks, and she says they "lift her mood" but do not help with her "fears". She told me again that our sessions have made her realise she is not a "hypochondriac" and that her pain is real.

E. Results of Recommendations

May 28, 2007--Session 2
After the session she called to tell me she went home and had a long sleep.

June 7, 2007—Session 3
She is still not able to do the SI series standing or sitting in a chair. She does the JFS every other day. She tells me that her patio door is very heavy, and she "hurts all over" when she has to open and close it. I have asked her not to do anything that causes pain, and wait to see if she will digest this and come to seeing more clearly what causes her pain. We talked a bit about her pain. I equate it to poking a snake with a stick- if you poke it, it will bite you. I want her to stop "poking her pain" to see if it is still there, and trying to change it by force.

June 15, 2007---Telephone Call
S telephones to cancel our session on 21 June, as she finally has a hospital appointment. She tells me again she has been "wrestling" with the patio door, instead of walking around the house and using the front door. (S. explained originally that she doesn't like to use the front door in case she runs into her "creepy" neighbour). S. is in a lot of pain, but has been doing the JFS most days. I am a bit discouraged, as she does not seem to have any discernment about what causes her pain. I am hopeful that some kind of diagnosis will give S. and myself something more specific to focus on. I hope she will not be fobbed off by the specialist.

June 26 2007--Session 4
The pain level today is about 4. S has only been doing some of the JFS, and she finds the pranayama for pain difficult, as she is unable to be quiet for very long, her mind is too "busy". I loaned her a CD of a guided Eagle visualisation one of my first teachers gave to me--it fits in with her Native American interests, and is very sweet, careful, and uplifting. S still talks of doing the arthritis diet, possibly in a few weeks.

July 3 2007--Session 5
She has been doing some JFS, swaying hips and standing SI series with knees together. She could not listen to the CD, as it doesn't work properly on her player. She says she has problems visualising things, her mind is full of worries and she is "afraid".

After the SYT session she stayed for a cup of tea, and revealed more about her family issues. S constantly goes over past events in her mind. She says she realises that there is a cycle or pattern of car accidents, even though she is the one that gets hit. She also spoke about how she is always the care giver, and no one ever cares for her. We talked about the Loving Kindness meditation, and I gave her a card with the words on it, and asked her to consider it. I explained how to do it, and how difficult I found it was to send it to myself, and how I hoped she would have some success.

The fact that she falls asleep in meditation means that she is stressed and doesn't sleep enough during the night, but I also believe it means that she feels safe and secure, and that there is a real sense of trust between us. I felt in this session that she feels she no longer has to prove to me that she is in pain, that I understand, and so she can let go of it a little bit. She was more willing to try the exercises than she ever had been before. The alternative view is that she is trying to please me by doing more- I hope this is not the case.

August 2 2007--Session 6
She has not been doing much of the JFS and feels "very low". She went 5 days without doing JFS. S called me after we had made the appointment and said that she was now taking anti-depressants and felt dizzy and sleepy, and was afraid to drive. She cancelled the session, then called back this morning and said she felt "much brighter" and felt able to drive again, so she came over as agreed. During the session she was much stiller that she has been in other sessions, not swinging her limbs and moving wrists and ankles very much.

August 15 2007--Session 7
S felt no ill effects from doing the JFS after our last session. She does JFS at home in a chair every other day, and tries to do every movement. Sometimes she takes a rest between difficult movements. She sets a timer for 25 minutes, sometimes she does it more quickly, sometimes she doesn't get much done. She says she is not good at relaxing, and has not been practicing her breathing while listening to music lately. She says she is "just jogging along at the moment", trying not to make too many changes. Her concentration and memory have improved since last year, although this means that more unhappy memories are coming back. She no longer wears pressure bandages, and walks more easily. The most constant pain she has now is in her right SI, and she describes it as "burning" and "numbness". The pain here seems to have taken on pitta and kapha qualities more than vata, and she is able to discern the specific areas of pain.

2. A. Name and description of the Condition

Chronic pain following an acute episode such as a car accident does not seem to relate to factors such as findings on physical examination, but to what are termed 'psychosocial variables', such as mood, stress and the social situation in which the pain occurs. Factors such as past experience, age, sex, anxiety, fear and depression all have an effect. To have pain day after day that does not go away, and that doctors cannot seem to diagnose or solve, is a terrible affliction. Problems such as financial hardship, strained relationships, side effects from medication and

sleeplessness, all add up to a feeling of powerlessness, a loss of self esteem, and a feeling of dislocation from family and friends. Worry, negative thinking and depression often follow on, and in S's case have become ingrained in her personality.

This mix of physical and psychological symptoms is difficult for the medical profession to deal with. Quite often a person is referred to a psychiatrist, who tells them they need to find a physical solution to their pain, and to a medical specialist like an orthopaedic surgeon who, unable to find a specific cause, refers them back to look for a psychological one. S. is unwilling to speak to a psychiatrist, antidepressants made her feel "loopy" and the large doses of ibuprofen she was taking made her feel ill.

B. Gross and subtle body common symptoms

"Chronic pain Long-lasting discomfort, with episodic exacerbations, that may be felt in the back, one or more joints, the pelvis, or other parts of the body. It is often described by sufferers as being intolerable, disabling, or alienating. Studies have shown a high correlation between chronic pain and depression or dysphoria, but it is unclear whether the psychological aspects of chronic pain precede it or develop as a result of a person's subjective suffering.

PATIENT CARE: The management of chronic, non-malignant pain is often difficult and may be frustrating for both sufferer and caregiver. The best results are usually obtained through multimodality therapy that combines sympathetic guidance with drugs (e.g., nonsteroidal anti-inflammatories, narcotic analgesics, and/or antidepressants), physical therapy, occupational therapy, physiatry, psychological or social counselling, and alternative medical therapies (e.g., acupuncture, massage, or relaxation techniques)." From **http://www.tabers.com**

In pain we are guarded, and always looking for the pain. For example, you move your arm until you feel pain, then say "there it is". This is avidya-- the body/mind is so caught up in the pain that you are blinded to the patterns and causes and can't see any way to change. In S's case she is looking for someone to "fix" her. Working with vata prana seems to be the best way to correct rajasic or tamasic tendencies. Pain is trauma or shock that the body/mind is holding on to. When an injury happens over and over again it becomes armour. The energy body is protecting itself. There is a tendency to tense or clench the whole body when moving or being still.

As Mukunda has explained, a vritti (seed) takes shape and turns into a vasana (a plant). With enough detail the vasana turns into a samskara (the plant's potential to blossom) and this becomes karma (an event destined to happen and repeat). This is the cycle of the mind, and unless the cycle is broken, the karma will be repeated.

With chronic pain vata is displaced and this results in fear and confusion. S. cannot recollect the details of her different accidents, and feels hopeless because she feels her injuries were not diagnosed and treated properly.

Annamaya Kosha: This veil hides our true self, and when the veil is thick with pain, one's ability to perceive oneself is lessened; the areas of pain are very general. As more prana comes into the body, the veil thins and perception becomes clearer, so areas of pain are distinctly noticed. By thinning the veils one may begin to move to a place that is free of suffering.

Pranamaya Kosha: When prana leaves its home, one loses the thinking part of the mind “manas”. When prana comes home, one feels energised.

Manomaya Kosha: Uplifting thoughts are needed to expand the prana, then the mind will become clear.

“The veil that hides the mind and the veil that hides the prana are conditioning. Conditioning makes you see things in the way that supports your hope or your fear. Both of these are suffering”.—M. Stiles, from SYT course notes

C. Related challenges

People in pain often experience negative emotions, such as guilt, anger, resentment, aggression, mental and physical exhaustion and fear. The people around them may experience these emotions as well, along with impatience and indifference. Indifference arises because loved ones feel helpless in the face of an ongoing condition that never seems to get better, and impatient that social events must be cancelled at the last minute, or in many cases not planned because there is “no point, you’ll be feeling ill”. The pain becomes almost a third party in the relationship, un-ignorable and omnipresent. Sufferers of chronic pain may be thought of as malingerers, hypochondriacs, and “making a mountain out of a molehill”.

3. Ayurvedic assessment and Ayurvedic based yoga recommendations

Vata imbalance shows as chronic pain coming and going with limited ROM. S is in constant motion, flexing and stretching limbs and swinging her feet when sitting in a chair.

Pitta imbalance shows as inflammation in the joints, and a loss of discernment after years of chronic pain, as well as trying to *force* change.

Kapha imbalance shows as stiffness and swelling around joints, depression, judging and being judged by others, powerlessness, despair, insecurity and low self esteem.

Chronic pain should be treated as a vata imbalance, vata creates pain and vata feeds it. Not too much strengthening, and lots of breathing techniques to relieve pain. Uplifting quotes may help: Patanjali’s sutras II 16, II 33,II 46, II 47, II 48.
Sutra II 16: “The suffering from pain that has not yet arisen is avoidable.”—M. Stiles

I need to be sattvic for her, so she can feel sattvic. Vata balancing with the JFS, wave breath, belly breath, and deep relaxation using the pranayama for pain techniques.

Increase body awareness, with discernment, to balance vata. Connect with nature, use guided visualisation and pranayama, loving kindness meditation and compassion towards self- very difficult for S. as self esteem is low.

4. Common body reading

Postural change	**Tight muscles**	**Weak muscles**
Forward head	SCM	Upper trapezius
High shoulder	Upper trapezius, levator scapula	Low trapezius, latissimus, pectoralis sternal

Feet turned out	Psoas, ext hip rotators, sartorius, gluteus maximus	TFL, gluteus minimus
Flat back	Middle trapezius, rectus abdominus	Lumbar erectors, psoas, hip flexors

5. Contraindicated yoga practices

Avoid any activity or exercise that causes pain. Compassion towards oneself should be encouraged. Pain in joints, so no kneeling or weight on wrists, therefore kneeling positions such as cat are contraindicated. JFS should be done seated in a straight backed chair, with a block under the feet to keep them flat after ankle exercises done. All JFS done gently for toning. Internal and external shoulder rotation done with straight arms held low, to tone around deltoid and take pressure off shoulders. Move slowly to improve discernment- think before you move, and notice how you feel.

6. General recommendations for the condition

A. Therapeutic/ free of pain

- Breathe fully and deeply using wave breath and intercostal breathing, keep the belly relaxed.
- When you are in chronic pain the breath tends to be shallow, the muscles cold and contracted from poor circulation.
- Deeper breathing lets the lungs, diaphragm, intercostal, back and abdominal muscles work more, generating heat in the core of the body.
- Deep, even breathing generates a calming effect on the emotions, reducing fear and anxiety, and diminishes tension held in the muscles and the mind.
- Consider the arthritis diet to reduce inflammation.

B. Stabilise situation

- Avoid moving into pain- avoid any movement that causes pain.
- Remember that the breath is the most important factor in lessening pain.
- JFS to gently mobilise and tone muscles, and to cultivate awareness and discernment.
- Relaxation and visualisation to calm mind and reduce fear and anxiety. Try to feel comfortable and safe at home, out in the world, and here in the sessions.
- Use warmth such as a hot water bottle on painful areas; take remedies such as flax seed oil, glucosamine and devil's claw.

C. Maintenance

- Stay with yourself, today, as you are. Try not to dwell on the past. Look at patterns and see whether your perception of things can be changed--- sutras II 16 and II 33.
- Look for comfort and steadiness in everything- sutra II 46 moving into II 47.
- Focus on the breath, breathe into any pain, and cultivate a new relationship with your painful body.
- Have a compassionate intention, and cultivate loving kindness towards yourself.

7. Questions and Answers from www.yogaforums.com

25/08/2006 ankylosing spondylitis & sacro-iliitis

Q. I'd like to ask your advice for a friend of mine.
He is a 42 year old male, diagnosed with ankylosing spondylitis & sacro-iliitis, having suffered bouts of iriditis for decades. He can only sleep past 5am with the use of slow-release painkillers. He has suffered from gastro-intestinal problems in the past, and has used elimination diets to try to identify foods which are “difficult” for him. I think these inflammatory conditions are known to be inter-related. Would a pitta-reducing diet be of benefit to him? Also, in terms of physical therapy, he is reasonably fit & slim, attending the gym regularly & having no alcohol or caffeine, but does not have a yoga practice. He has a marked internal hip rotation beyond normal ROM (can sit comfortably in Virasana, but with the feet rotated out with the inner edge of the foot on the floor at 90 degrees to the shin), but such restricted external rotation that he cannot cross his legs. I think the joint freeing series would definitely be of benefit, but I wasn’t sure about the SI release when there is such a degree of inflammation. Would it be safe? Is there anything else that you could recommend for him to try (hard I know without a proper exam).

A. Both symptoms are due to increased pitta. So for any inflammatory conditions such as this an anti pitta diet is warranted; see any Ayurveda book for details. Since he is not doing a yoga practice that is the first place to begin to get him into a regular practice which should focus on stress relieving (vata balancing). This should be my joint freeing series (JFS) , plus series to tone the weakened muscles and those related to diminished range of motion (ROM). To increase ROM tone the muscles doing the motion such as external hip rotation (#5 in my JFS). The SI release exercise needs to be done on yourself consistently for 30 days and you must know how to modify it. Once you meet that requirement i will email you a copy to share with others. I assume you learned it directly from me or one of my students but that requirement must be meant or it is not effective. namaste mukunda

22/052003 ankylosing spondylitis
Q. A friend of mine has been diagnosed early ankylosing spondylitis. He has pain in his back, neck, shoulder, knee and hip in that order. He has stiffness in lower back and he finds difficulty in bending forward. The disease is in early stage. What type of yoga can help him

A. In general best is moderate hatha yoga or viniyoga rather than more vigorous approaches. I would especially recommend regular practice of my Joint Freeing Series described in my book Structural Yoga Therapy.

17/03/2007 s/i chronic pain
Q. I just started working with a client with chronic pain in her right SI joint. She occassionally sees a PT who "puts her back together" from the sits bones through the lumbar spine. After this adjustment, she has some temporary relief from most of the pain, but she is unable to keep the SI in place. When she came to see me, she had just returned from a plane trip and a "bad back" week. I gave her the SI exercise and the JFS for ankles, knees, hips. A week later, she was still having a "bad back" week with much pain. After practicing the exercises, which she did 4 times during the week, she felt less pain. The next day, however, she did not feel well at all. Should she continue with the exercises? Should she expect pain as her body adjusts to a change in muscle strength, flexibility, etc?

What should be my approach with her? I have been working with her on relaxation to decrease vata. Toward the end of relaxation she was aware that she felt no pain. As

she had that awareness, pain came back. Also, I had her do sama vritti ujayii pranayama. While concentrating on her breath, she had no pain. Her homework for this week is to work with relaxation and breath.

Where should I go from here? So that your recommendation can be more specific, she has very limited ROM in internal and external hip rotation in the supine test position. She has excessive ROM in external hip rotation in the prone test. Hip flexion on the right side as approaches 70 degrees causes pain in right SI. In abduction on the right side, she feels "stuck" as she approaches 45 degrees.

A. First you need to be sure the s/i exercise works to correct the motion. Second is to have clear MT findings so that you know what are weakest muscles that destabilize the s/i and what secondary movers are weak in the region. Third, the exercises you give to change these need to be progressive so that both of you can assess her getting stronger. That is giving a progress of something she can only do 6X then make sure her stamina increases while being comfortable to twice the start. Usually this should be within 4-6 weeks. You do not mention results of MT. That is the place to start.
Your ROM tests will only tell you what is tight. That is not where to work with an unstable s/i. Begin only with toning and make sure she is not doing any activity that increases her ROM. An excessive ROM of external rotation needs to be tightened so that she is back to normal. You do not give me MT results, So check your MT and see if internal rotation is weak. Grade the progression of MT exercises so that you can both see progress. Start with simple but challenging such as sunbird with rotations then progress to JFS #5. And doing hip rotation tone while at work or walking.

Be sure she informs you of all physical activity and then assess those activities to be sure they are not contradictory to your program. If the PT has given exercises see that they are clear and that she is not overwhelmed. If PT only does manipulation then you or she needs to tell PT that stability and tone is not the result of her work. So question is if PT is not helpful but temporary why continue it? Get more communication from her, she should avoid anything that isn't helpful. Temporary help is not helpful. This condition requires being tough so that what ever is helpful is done even if it is just one or 3 exercises. Vata requires lots of pranayama, relaxation, yoga nidra, resting when they are tired, and inquires into sleep, sex life, bowel motions, fear, etc. it is a whole person counselling that is needed to be of optimal help.

09/10/2005 Chronic Pain
Q. When working with a client who has chronic pain -
1. Do you want to strengthen the opposing muscle? Or, is it better to strengthen the muscles below the site of injury?
2. You say in your book i.e. last paragraph on page 295 to be mindful of the pain but not to exert through the pain. Can you explain that paragraph? It sounds like in chronic conditions of pain you want to work through the pain gently but also be mindful of the pain and watch the sensations change and move. Is this what you are saying? And then this will evoke the "relaxation response"?

A. 1) As always find out what is weak and focus on that. When weakness is found below injury or pain, that I give special extra attention and also more variety on toning.
2) If you are delicate when facing pain you will find that this gentleness (translate to YS II, 47) produces the relaxation response. Especially when coupled with the intention to relax your effort. That right level of effort also lessens pain. It may take some testing but it works!

09/10/2005 Low back pain & psoas
Q. I have a client who has chronic back pain that worsens with rest and gets better with movement. It is difficult for him to feel any sort of quad stretch no matter how deep he goes and it seems that when I instruct him to use his psoas instead of the quads to flex his hip it is very difficult. He can access the muscle, but it is a lot of work for him to use it - even in a simple Vinyasa like Apanasana. I assumed the psoas was weak and that was the cause of his low back pain, however he stands with his feet in a greater than normal external rotation, which also leads me to believe that his external rotators are tight. Can the psoas still be weak if the rotators are tight? Thank you for your assistance.

A. Has he had a medical diagnosis? Is he in psychotherapy? What is his major stress in life currently? Sounds to me like he is dealing with, or rather avoiding, deep seated emotional pain.

Did you check his knee flexion ROM? That will tell us if he really needs to do quad stretch. If heel goes to hip then no need for it. With standing in turn out his internal hip rotators are likely weak, external are likely strong. You need to Muscle Test (MT) to be sure. Can you do that? Test all concerned muscles - gluteus maximus, medius, psoas, hamstrings too

20/05/2003 Wrist Pain
Q. I write to you re an ongoing problem in my right wrist. About 2 months ago I fell on it (no, not in class!!) The doctor thought I had fractured the scaphoid bone, as the pain was in that region. I had an x-ray about 2 weeks after the accident, but no evidence of any fracture. I have been treating it since then, with Chinese herbs, acupuncture, homeopathy etc. Doing that has allowed me to continue yoga, but every so often the pain reoccurs, particularly doing Chatturanga, Urdhva & Adho Mukha Svanasana & handstands & Urdhva Dhanurasana, & all the jump throughs necessary in Ashtanga.

I have just come back from an ultrasound again nothing was detected, that is not soft tissue damage ... the doctors have basically discharged me, saying because of my age (56) it must be arthritis!!! My acupuncturist just says "Keep getting acupuncture & taking the herbs & homeopathy.' The main area of pain is halfway on the inner side of the first metacarpal between the knuckle of the first digit on the first finger, & my wrist, in a small area only. Have you any suggestions? My question to you, is have you any knowledge in this area at all?

A. I have experience with all types of injuries and while not specifically to the scaphoid bone (just below the thumb), I have seen how yoga can both improve and irritate injuries. My main suggestion to you is to not do weight bearing motions that aggravate it. The wrist is delicate and does not recover quickly when it is stressed. I know of massage therapists and yoga teachers who continue to keep pressure on the bones due to their work and as a result have chronic troubles. The series that you do is essentially acting as a repetitive motion assault to the wrist injury. Repetitive motions increase pitta (the energetic source of irritation and inflammation) which will tend to increase heat throughout the body but especially in soft tissue. Joint injuries are characterized by localized heat and they need to cool off (increase kapha) to heal. I realize that most persons doing a serious practice are not likely to heed my warning but I hope you will be different. My recommendation is for you to strengthen your sensibility muscles and take a rest from irritating the inflamed tissue with those practices that you can see are clearly aggravating you. Let it heal by doing what you are already doing with Chinese medicine but most of all by avoiding those practices that are weight bearing to the wrist.

If you want to heal it at a deeper level I would encourage you to do the anti pitta diet recommended by my teacher Indra Devi. While you react strongly to the suggestion of possible arthritis, it sounds like you are promoting the pitta energy that can cause it. Regardless of whether or not you have arthritis, if you are engaged in an aggressive (rajasic) form of exercise; that is the underlying factor causing persistent trouble. The diet I would recommend lessens the body's tendency to retain heat whether in the digestive tract or joints. You can find the details to the diet on www.yogaforums.com -- then search for arthritis diet. Best wishes in healing. Namaste Mukunda

8. References

Books

Stiles, Mukunda. *Structural Yoga Therapy*. San Francisco: Red Wheel/ Weiser, 2000

Stiles, Mukunda. *Yoga Sutras of Patanjali*. San Francisco: Red Wheel/ Weiser, 2002

Stiles, Mukunda. *Asana: Theory and Practice. Teaching and Application*. Yoga Therapy Center, 2006

Satchidananda, Sri Swami. *The Yoga Sutras of Patanjali*. Yogaville Virginia: Integral Yoga Publications

Dyson, Sue. *Coping Successfully with Migraine*. London: Sheldon Press SPCK, 1991

Kraftsow, Gary. *Yoga for Wellness, Healing with the Timeless Teachings of Viniyoga*. New York, Penguin, 1999. Chapter 3

Jarmey, Chris. *The Concise Book of Muscles*. Chichester, England: Lotus Publishing, 2003

Biel, Andrew. *Trail Guide to the Body,Third Edition*. Boulder, CO. Books of Discovery, 2005

Clemente, Carmine D. *Anatomy: A Regional Atlas of the Human Body*. Baltimore MD. Lippincott Williams & Wilkins, 2007

Websites

http://www.nass.co.uk/
National Ankylosing Spondylitis Society (NASS). NASS was founded as a registered charity by patients, doctors and physiotherapists in 1975 at The Royal National Hospital for Rheumatic Diseases in Bath. They provide information, advice and support.

http://www.yogasite.com/chronicpain.htm
Baxter, Christopher Ken. Chronic Pain Release Through Yoga

http://www.iytyogatherapy.com/
Papers on Pain Management and Osteo-Arthritis

http://www.wellcome.ac.uk/en/pain/microsite/medicine3.html

http://en.wikipedia.org/wiki/Erythrocyte_sedimentation_rate

http://en.wikipedia.org/wiki/Dysphoria

http://dictionary.reference.com/browse/fobbed

http://www.tabers.com

http://www.lovingkindnessproject.blogspot.com/

http://en.wikipedia.org/wiki/Lovingkindness

9. Appendix

Pranayama for Pain

Make a strong resolution to end the pain- how well this works is dependant on the force of the sankalpa

Technique one

1. sit or lie down and make sure you are really comfortable
2. slow down your breath
3. ask your thoughts to come more slowly

Keep visiting each stage for a bit and make sure each one is fine. Keep checking over and over that you are comfortable, then check that the breath is slow, then check that you are asking your thoughts to come more slowly

Technique two

1. Breathe into the pain, send your breath into the pain and watch what happens.
2. Describe the pain to yourself- is it sharp, dull, hot, cold, radiating, specific? then breathe into your pain consistently. Imagine the centre of the pain is a bullseye, your breath is the bow, and your awareness is the arrow. Inhale energy, then imagine that as you exhale, energy is spreading around the bullseye. Exhale the breath out but hold energy in that place.

Technique three

1. Place your hands in yoni mudra, wherever you like- it could be on your abdomen, or on a specific spot where there is pain.
2. When you feel sensations coming into that spot move the hands down to the lower abdomen. Now gather sensations from the rest of the body into your hands
3. You can put your hands on a place where there is pain (if you can reach it), and breathe into that area, trying to make it smaller and smaller until it disappears

Technique four

1. Focus your breath below the navel and continue to inhale and exhale there consistently for 30 seconds, 1 minute, or longer.
2. You can place your hands over the lower abdomen if it helps bring the breath to that area

Technique five

1. Feel that the breath is two pointed and becomes one point as you inhale and exhale. You inhale and feel two streams of air coming into the nostrils, then they join at the bridge of the nose or at the sinuses and become one stream. You exhale and feel one stream of air becoming two streams as the air leaves your nostrils.
2. Find the fine channels within the nostrils and feel the breath coming in and out and meeting at the root of the nose. Find the beginning and the end, where the two become one in the sinus or third eye. Inhale two into one, exhale one back into two. The meeting spot can vary from person to person, and even in the same person from time to time. You try to get the energy to gather at the meeting point and there will be no pain.

Handout for Maintenance 15 August 2007

3 Things to focus on- you don't need to do anything else if you don't want to:

Wave breath
Inhale through the nostrils, down through the upper chest, front and back ribs into the abdomen
Exhale, the abdomen pulls back slightly, the breath comes up and out through the nostrils.
Feel that the whole of the lungs from top of collarbones to front and back ribcage, to abdomen, fill and empty

Joint Freeing Series
Do this every day, or as often as you can. This series of 21 movements moves each joint gently and systematically through its full and natural range of motion. You can do it sitting in a chair, lying down, standing, or sitting on the floor. Just explore and expand your ability to move your toes, ankles, knees, hips, shoulders, spine and neck, never moving into pain. Even if you are unable to do certain movements, you should continue to breathe fully while visualising your body moving.

Relaxation
Lying on your back, on your front, or sitting upright in a comfortable chair.

1. Get very comfortable
2. slow down your breath
3. ask your thoughts to come more slowly

Keep visiting each stage for a bit and make sure each one is fine. Keep checking over and over that you are comfortable, then check that the breath is slow, then check that you are asking your thoughts to come more slowly. Relax completely.

Things to keep in mind:

Be aware of your body- think before moving
Feel stable in your body, never move without thinking and become so unstable you might fall over.

Breathe into your pain, and have compassion and loving kindness towards ***yourself***

The breath is the most important factor in how you feel- when the breath is full and even, you will feel more stable and comfortable.

Positive mental attitude- Sutra II 33
Keep good company, both internally and externally

Alternate Nostril Breathing

Forefinger and next finger folded into palm
Use the thumb and ring finger to close the nostrils
Take 5 deep even breaths
Raise hand to nose, elbow down, shoulders relaxed

Close right nostril and inhale through the left nostril
Close left and exhale through the right nostril
Inhale through right nostril
Close right nostril, exhale through the left nostril
That's one round
Inhale left, close left, exhale right
Inhale right, close right nostril, exhale left
That's two rounds
Continue for 5 rounds, then repeat one or two more times (10-15 rounds)

10. Biography

Donna Lambert started practising yoga in 1997, focussing on the Ashtanga vinyasa tradition. Her main teachers are Nancy Gilgoff, John Scott, Ron Reid and Danny Paradise. She trained with The Life Centre in London for RYT 200, and is British Wheel of Yoga Diploma accredited. Donna has been teaching group and private Ashtanga and Hatha yoga classes since 2003.

In April 2006 she met Mukunda Stiles and became convinced that Structural Yoga Therapy was the answer to relieving her own pain and injuries, and could bring about dramatic changes to people in pain. She continues her sadhana under Mukunda's guidance.

Chronic pain is pain that lasts a long time. In medicine, the distinction between acute and chronic pain is sometimes determined by the amount of time since onset. Two commonly used markers are pain that continues at 3 months and 6 months since onset, but some theorists and researchers have placed the transition from acute to chronic pain at 12 months. Others apply the term acute to pain that lasts less than 30 days, chronic to pain of more than six months duration, and subacute to pain that lasts Chronic pain tends to be very difficult to manage because of its complex natural history, unclear aetiology and poor response to therapy. Chronic pain ...Â Biomedical yellow flags: severe pain or increased disability at presentation, previous significant pain episodes, multiple site pain, non-organic signs, iatrogenic factors. Psychological yellow flags: belief that pain indicates harm, an expectation that passive rather than active treatments are most helpful, fear avoidance behaviour, catastrophic thinking, poor problem-solving ability, passive coping strategies, atypical health beliefs, psychosomatic perceptions, high levels of distress. Psychosocial factors are also important in the development of chronic pain and should be addressed as part of a holistic approach to perioperative care. chronic pain. postoperative pain.Â There are multiple further projections to the cerebral cortex and other higher centres. Central processing of impulses leads to the experience of pain. The complex pathways of nociceptive transmission are well described 5 (figure 1).