



MANAGING
PARKINSON S DISEASE
AND ESSENTIAL
TREMOR SYNDROME
WITH STRUCTURAL
YOGA THERAPY

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Introduction

This paper addresses how Structural Yoga Therapy can be used as a profound holistic tool in the management of Essential Tremor Syndrome (ET) and Parkinson's Disease (PD). I recommend that readers new to either ET or PD first review section 2A - Name and Description of the Condition. This will enable the reader to more thoroughly understand the complexities and challenges presented in this case study.

Nicole and I began our SYT work together in April 2006 with the understanding that we were dealing with the management of symptoms associated with ET. Nicole has been my student for 6 years now. She was diagnosed with ET in 2001. In the summer of 2006, a startling new diagnosis was presented to her by a new neurologist - Parkinson's Disease. Because PD is a life threatening, degenerative central nervous system disorder and ET is not, this came as an incredible shock to Nicole. As a result, our work together rapidly changed and deepened.

This paper will present how my work with Nicole as a Structural Yoga Therapist has supported the reduction and management of ET symptoms, and how Structural Yoga Therapy continues to play a significantly positive role as Nicole journeys through life with Parkinson's Disease.

1a. Case Study Client Profile, Initial Intake, Review of Symptoms, Subjective Pain Level, Their Self Assessment and Goals

Client Profile

Nicole is a forty year old woman. She is 5' 6" and weighs 214 pounds. She is a bright woman with a quick wit. Nicole has been graced with an incredible array of health challenges in her life time, including depression, anxiety, obsessive compulsive disorder, asthma, hypothyroidism, kidney cancer, Essential Tremor Syndrome, Parkinson's Disease, and chronic moderate discomforts from low back pain, sciatica, sacroiliac dysfunction, and piriformis syndrome that flare with stress. In addition to these health challenges, Nicole is a mother of two children. Her young son has Asperger's Disease.

History Leading up to Essential Tremor Diagnosis

Nicole began a professional career in the field of nursing in 1981. She excelled in her profession quickly, leading a nursing staff her first year after graduation. She developed an orientation program for registered

nurses, became a critical care nurse in 1982, and six years later became an emergency flight nurse, traveling across the country sometimes several times a day. Although she loved her profession, her work created a high level of stress, which, Nicole now reflects, may have been the manifesting factor that led to depression, anxiety, and ultimately ET.

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Nicole was diagnosed with mental illness in 1990. She experienced serious bouts of suicidal depression. Morbid thoughts overwhelmed her. She began to think negatively and obsessively. Because of drug sensitivities, finding an effective drug treatment to reduce her depression proved difficult. One drug created shaking so severe that Nicole was unable to feed or dress herself. Due to this, Nicole was unable to successfully continue working. Shortly after discontinuing work, her husband received a promotion and they moved to Colorado, where she and her husband began to raise a family. That same year, she was diagnosed with renal cell carcinoma of the right kidney. A radical nephrectomy and lymph node dissection was immediately ordered.

In January 2000, while nursing her newborn daughter, Nicole noticed a slight shaking in her right hand. She felt occasional numbness and tingling, which alarmed her. She went back to work three months after the birth of Faith Ann, but by summer, she began to notice a marked increase in shaking. Nicole was diagnosed in 2001 with Essential Tremor Syndrome.

A new Diagnosis Parkinson's Disease

It was not until August 2006 that Nicole was diagnosed with Parkinson's Disease. A new neurologist reduced the amount of a tremor-reducing drug she had been taking. He had hoped to add another drug that would be more beneficial to Nicole. This created a violent reaction. She developed an out-of-control resting tremor involving her entire right side. Each day she worsened. Depression and severe mood swings overwhelmed her. She was taken to the emergency room where she was given a drug to soften and control her violent tremor. The reduction of the drug had unveiled symptoms not associated with ET. Her new neurologist presented her with a new diagnosis: Parkinson's Disease with Essential Tremor Syndrome.

Initial intake

Nicole was tired and unhappy the day of intake. She told me her mother had passed on the summer before and she was experiencing sadness and loss. In addition to this very real loss, the neurologist who she had worked with for 5 years had died that same year. She had committed suicide, which came as a terrible surprise to Nicole. Although Nicole planned on seeing a neurologist in August, she mourned the loss of a doctor she had trusted. Nicole's neurologist had been very impressed with the positive role that yoga was playing in Nicole's life and wanted to meet me. I was very excited about the possibility of forming a relationship within the medical field and called leaving messages. It was very sad to hear that Nicole's Doctor committed suicide, as I would have loved meeting and working with her to support Nicole, and had wanted to ask her for a testimonial for this paper.

"Nicole's neurologist had been impressed with the positive role that yoga was playing in Nicole's life and wanted to meet me."

Review of Symptoms, Pain Level, Self Assessment

- Right arm and hand shakes mildly due to ET tremor
- Pain in hip joints, described as “hot”, 9 pain level, displaced Pitta due to Vata imbalance
- Chronic low back pain, sacroiliac dysfunction, piriformis syndrome and sciatica
- Stress, anxiety, obsessive, compulsive thinking, fatigue, depression and insomnia
- Tight upper back/neck muscle pain, occasional headaches
- Sluggish digestion

Nicole's Main Yoga Therapy Goals

- To increase range of motion and reduce rigidity and pain, especially to right side of body
- To reduce low back, hip socket, sciatica, piriformis, and sacroiliac pain (these have floated in and out of her life for six years)
- To reduce weight and increase core strength
- To increase stability and balance to leg limbs - Nicole's left leg “drags” when medications are switched “off”, and she feels unstable often
- To learn self-empowerment tools including breathing and relaxation techniques for increasing positive mind thoughts and reducing ET tremor, insomnia, stress, anxiety and depression

1b. Physical Assessment and Postural Reading

Standing Body Reading

- Head rotates and tilts to the right
- Right side of body rotates anteriorly, left side rotates back posteriorly
- Right arm is longer than left arm
- Right hand shakes mildly, ET tremor is often present in both hands
- High left shoulder
- 20% carrying angle, both arms
- Nicole is right - handed
- Both humerus bones internally rotate, creating a "sunken chest" appearance
- Knees bend slightly while standing
- Both feet turn out considerably, right foot is more externally rotated
- Right leg is longer than left leg
- Eyes do not blink at regular intervals
- Facial expression is often blank
- Pulse reading - Vata: slithering, comes and goes

Sacroiliac Evaluation

- Left sacroiliac joint moves down, both joints feel inflamed.

1b Range of Motion Testing

Location	Joint/Action	April R.O.M.		Sep R.O.M.	
		Left	Right	Left	Right
Supine Ankle	Dorsi-flexion 20°	6	7	12	10
	Plantar-flexion 50°	43	40	49	50
Supine Knee	Flexion 135 -150°	129	128	130	131
Supine Hip	Bent Knee Flexion 150°	103	111	110	118
	St. Leg flexion 90°	78	75	74	72
Supine Shoulder	Flexion 180°	174	176	171	174
	External Rotation 90°	90	106	92	93
	Internal Rotation 80°	65	60	55	46
	Adduction 130°	97	97	99	100
Supine Elbow	Extension 0°	20	20	20	19
Supine Neck	Lateral Flexion 45°	32	40	34	40
	Rotation 70°	58	34	57	37
Prone Knee	Flexion 135-150°	120	124	118	115
Prone Hip	External Rotation 45-50°	70	78	55	60
	Internal Rotation 35°	21	18	25	20
	Extension 15°	9	6	14	11
Prone Shoulder	Abduction 40°	20	15	22	18
	Extension 50°	15	20	22	24
Side-lying Hip	Abduction 45°	40	42	40	40
	Adduction 30°	20	28	20	26

Ib. Muscle Testing

Location	Joint/Action	April M.T.		Sep M.T.	
		Left	Right	Left	Right
Supine Ankle	Dorsi-flexion 20°	5	4	5	5
	Plantar-flexion 50°	5	5	5	5
Supine Hip	Bent Knee Flexion 150°	2	2	3	3
	St. Leg flexion 90°	-	-	-	-
Supine Shoulder	Flexion 180°	+2	2	3	3
	External Rotation 90°	2	2	4	+2
	Internal Rotation 80°	2	2	+3	+3
	Adduction 130°	1	2	+3	+2
Supine Neck	Lateral Flexion 45°	4	4	4	4
	Rotation 70°	3	+2	3	3
Prone Knee	Flexion 135-150°	2	2	3	3
	Extension 0°	2	2	3	3
Prone Hip	External Rotation 45-50°	2	1	+2	2
	Internal Rotation 35°	1	1	+2	3
	Extension 15°	2	2	+3	3
Prone Shoulder	Abduction 40°	1	1	3	3
	Extension 50°	3	3	+3	+3
Side-lying Hip	Abduction 45°	3	2	+3	3
	Adduction 30°	3	3	+3	+3
Isolated Tests	Quadratus Lumborum	3	3	4	4
	Sartorius	2	2	3	3
	Psoas	2	2	-3	3
	Gluteus Maximux	-3	2	3	3
	Tensor Fascia Lata	3	3	+3	+3
	Mid-Trapezius	3	3	3	3
	Latissimus Dorsi	2	2	+2	+2
Supine Spine Flexion	Abdominals	2		+2	

1c Summary of Findings

Location	Tight	Weak	Muscles to Release
Ankle/Foot	Plantar flexors		Plantar flexors
Hip	Flexors, extensors, external rotators - gluteus maximus, 6 deep external rotators -right is tighter, posterior fibers of gluteus medius, abductors	Flexors, extensors, adductors, abductors, anterior gluteus medius - right is weaker, internal rotators	Piriformis - Right is tighter
Shoulder	Flexors, extensors, external rotators, internal rotators, abductors, adductors	Flexors, extensors, external and internal rotators, abductors, adductors	
Neck	Right lateral flexors, rotators tighter	Rotators	Upper trapezius, levator scapulae
Isolation Muscle Tests	Sartorius, psoas, rectus femoris	QL, sartorius, psoas, gluteus maximus, TFL, latissimus dorsi - right is weaker, mid trapezius, low abdominals	

1d Recommendations Session 1

- **Sacroiliac Stabilization Exercise with Sama Vritti Ujjayi Pranayama**

Goals: To stabilize sacroiliac joints, to increase circulation to pelvic region, to increase "breath with movement" awareness using Sama Vritti Ujjayi Pranayama

Refer to Wendy Williams SYT paper - Low Back Pain, page 35, on SYT web site for detailed instructions. To learn more about Sama Vritti Ujjayi Pranayama, refer to pages 53-56 of Structural Yoga Therapy by Mukunda Stiles.

- **Stick Pose - Joint Free Series #1-3**

Goals: To increase ROM to ankle dorsi-flexors and plantar-flexors, to bring awareness to the limbs, very important for PD. Refer to SYT Joint-freeing Chart 1 for description, 12 counts.

- **Quadratus Lumborum "Walk"**

Goals: To increase QL strength, very good movement therapy for hip imbalance issues.

From Stick Pose, lift left buttock up off floor and slowly walk it forward of the right. Repeat on other limb. Walk forward/back 6 counts. Rest. Repeat.

- **Joint Freeing Series #5 - Modified on the Wall**

Goals: To increase range of motion and strength to internal and external hip rotators, to increase balance, to strengthen abductors and, specific to item B (below), to strengthen internal hip rotators.

This posture was modified standing. The seated version was too difficult for Nicole.

- Stand in Tadasana near a wall. Holding the wall with one hand, externally rotate and abduct right leg, then internally rotate and adduct. Repeat on left leg. 8-12 counts.
- From Tadasana, internally rotate right leg, abduct out to side, and pulse 8-12 counts. Repeat on left leg. Rest. Repeat.

- **Joint Freeing Series #6**

Goals: To relieve sciatica and low back pain, to bring fresh blood flow to spine, sacrum and hip joints, to gently strengthen medial gluteus maximus muscle.

- A. Come to all 4's on mat. Place your hands forward of shoulders wider than shoulder width apart. Place knees wider than hip width apart, toes touching. Exhale, flex spine, Inhale, extend spine - mild cat/cow movements. 8-10 counts.
- B. Come down on to forearms, with elbows forward of shoulders 4-6 inches to suspend spine. Same movement and count as A.
- C. Place a standard bolster under torso, rest in Frog Pose. Perform pelvic tilts, 8-10 counts. Rest for several breaths.

This movement brings circulation and fresh blood flow to the low back, sacrum, buttock, and hip joints, and helps to decompress the low spine. The anterior and posterior tilting of the pelvis acts as a pumping action, bathing the area with freshly-circulated blood and fluid, and is an excellent therapy for low back, disc, sciatica, and sacral issues.

- **Cat Bows at Wall**

Goal: To build upper body strength, to reduce neck and upper back discomfort.

Place hands on wall, shoulder height, with elbows bent. Fan knuckles to bring awareness and life in to hands (important for PD). Exhale, adduct scapula and pull down to contract key weak back muscles, as chest comes towards wall. Inhale, release away from wall. 6-8 counts. Rest. Repeat.

- **Warrior 1 - Virabhadrasana 1**

Goals: To strengthen and stretch hip flexors and extensors, to strengthen hip adductors, to stretch calf, to strengthen mid-back, to open heart.

- A. Stabilize in Warrior 1. Align both ilia so they face forward and are well balanced. Inhale, raise arms in flexion, straighten front knee, contract quadricep. Exhale, bend knee, displace chest forward, bend elbows, adduct and depress scapula. 8 Counts.
- B. Remain in Warrior 1 Pose with elbows bent and chest displaced for 3 breaths. Rest. Repeat on left side. Repeat entire sequence.

- **Pelvic Tilts with Abdominal Contractions**

Goals: To increase circulation to the sacral, back and pelvic region, to lengthen low back, to reduce sacroiliac pain, to strengthen low abdominal/psoas muscles.

- A. Rest supine with knees bent. Tilt pelvis forward, anterior, then back, posterior. 8-12 counts.
- B. Rock pelvis posteriorly, gently press low belly towards spine. Continue to exhale counting 1...2...3...4...5... and release on inhale. 5 counts.

- **Bridge Pose - Setubandhasana - Variation 1**

Goals: To strengthen hip adductors, hip extensors and shoulder extensors, to stretch and open hip flexors, to strengthen around sacroiliac.

Rest supine with knees bent, feet close together, 4 inches apart. Place hands on floor next to hips, palms facing down. Press arms firmly down to encourage activation of shoulder extensors. Inhale, lift hips. Exhale, keep lift of hips, gently squeeze knees together, strengthening hip adductors. Inhale, release squeeze, lift hips more, exhale, bring hips down. Repeat 6-8 counts.

- **Bridge Pose - Setubandhasana - Variation 2**

Goals: To strengthen hip extensors, adductors and external rotators, to stretch hip flexors, to increase shoulder ROM, to increase neck rotator strength and ROM, to strengthen around sacroiliac joint.

- A. Rest supine with feet more than hip width apart, toes rocked out more than heels, arms resting by hips. Inhale, lift hips. Exhale, down. 6-12 counts.
- B. Once this rhythmic movement is established, begin to use neck rotators and alternate arms. Inhale, lift hips, lift right arm. Exhale, keep hips lifted, turn head to left, inhale head turns back to center, exhale, release hips and arm down. Repeat on other side. 6-12 counts.

- **Energy Freeing - Apanasana**

Goals: To stretch low back fibers and bring spine into balance after flowing bridge sequence, to stretch gluteus maximus and lumbar erector spinae muscles, to strengthen abdominals and psoas muscle, to increase digestion.

Bring knees to chest, take hands to back of thighs. Exhale, bring knees to chest. Inhale, rock knees away from chest. 12 counts.

- **Deep Relaxation Pose with Return to the Source Mudra - Savasana with Yoni Mudra**

Goals: To explore energy healing, to increase pranic consciousness to the low belly area, to reduce pain, to promote a deep sense of relaxation and peace.

Rest on floor with knees bent. Place hands on low belly. To Practice Yoni Mudra, bring thumbs and index fingers together, making an upside down chocolate kiss shape. Inhale, imagine healing energy moving into this space, exhale, let this energy touch areas of the body in pain. 5 minutes.

- **Additional Recommendation - Massage therapy**

Goals: To release chronically tight calf, piriformis, neck and shoulder muscles, to increase circulation and release tension on a physiological level.

id Recommendations Work Yoga Program

In addition to Nicole's Yoga Therapy program, I gave her part of the Joint-Freeing Series - Pavanmuktasana - to practice during work in her chair. Because Nicole's work requires her to sit for long periods of time, I wanted to give her a movement practice for the work hours. I included a stretch for the gluteus maximus/low back, simple shoulder circles, and a chair twist to stretch her tight piriformis muscles. I suggested Nicole practice this sequence up to twice daily at work, or as needed.

- **Modified Joint Freeing Series on Chair - JFS #1, 2, 3, 4, and 9 through 21**

Refer to Structural Yoga Therapy by Mukunda Stiles, Chapter 15, "The Joint Freeing Series - Pavanmuktasana" pages 121-123 for detailed instructions.

- **Gluteus Maximus/Low Back Chair Stretch/Ankle Circles/Calf Stretch**
- **Shoulder Circles**
- **Chair SageTwist/Bharadvajasana**

Additional Recommendations

Sacroiliac Dysfunction/Piriformis Syndrome: Don't sit for long periods of time, always move pelvis and sacrum as one unit, increase circulation to the area, strengthen muscle fibers surrounding sacrum area and below the joint, gently stretch piriformis in variety of ways, massage for release is best, reflect on what is "dysfunctional" in life and make changes to increase sattva, nourish with Vata reducing foods, liquids, oils by increasing Kapha elements, rest, disassociate from negative thinking, surround yourself with positive energy and people. Poses such as Janu Sirsasana/Knee to Head and Baddha Konasana/Bound

Angle can destabilize/unlock the sacroiliac joint. Caution is advised. For further information, see Janet Jacob's SYT Paper - Sacroiliac Dysfunction, on SYT web site.

Sciatica: In addition to Sacroiliac Dysfunction/Piriformis Syndrome recommendations, hydration is essential. Practice daily spine decompression postures, nourish with "cooling" pacifying foods, activities, thoughts, attitudes, emotions and topical treatments. Develop and stick to regular daily routines, including yoga therapy program, meals, sleep. Topical treatment of coconut oil/aloe vera is soothing, cooling and anti-inflammatory. No straight leg forward folds. Reflect on what is "hot" in life and make lasting changes to cool and harmonize. Sciatica flares whenever there is imbalance to the Koshas. Get to know and care well for the multi-dimensional layers of your being. For further information, see Max Isles SYT Paper - Sciatica, on SYT web site.

Session 2 One week later

Nicole greeted me today filled with enthusiasm and much more energy compared to last week. She had missed one day of yoga since her initial yoga program was given to her a week ago. She commented that on the day she missed doing her yoga program, she really felt the effects of NOT doing her yoga! The "hot" pain in her hip that she rated a 9 last week was considerably less today. She described it as a 3. Nicole then told me that she's been anxious this week. She needs to find a new job because she's experiencing anxiety at work. The Joint Freeing Series that she's been practicing at work has helped considerably. She especially loves the gentle gluteus maximus/low back chair stretch. This gentle stretch seems to relieve her sciatica discomfort. Nicole went for a massage and loved it. Sleep has been an issue for her due to work stress.

The "hot" pain in her hip that she rated a 9 last week was considerably less today. She described it as a 3.

After checking in with Nicole and listening to how her week went, I checked her sacroiliac joints. Her right sacroiliac joint wasn't moving. After performing the Sacroiliac Stabilization Exercise, I rechecked her joints and both moved well. Last week her left sacroiliac was moving down. We went through last week's program to make sure Nicole understood each movement well, which she did. I added a restorative posture due to the increased tension at work and asked if she enjoyed journaling. I thought it might be helpful for her to begin journaling to get her pain, worry and tension out of her body and on to paper. She was intrigued by this suggestion.

- **New addition to her program: Legs Up Wall Pose - Viparita Karani with Sama Vritti Ujjayi Pranayama**

Goals: To reduce anxiety at work, to increase sleep, to reduce shoulder/neck pain, to strengthen respiratory function, to increase blood flow to brain.

Rest in posture with bolster support for 10 minutes or as needed, focus on Sama Vritti Ujjayi Pranayama.

Session 3 Two weeks later

Nicole continues to experience a low level of discomfort. Nicole is able to sensitize to possible flare ups and then takes time to immediately address her body, mind and breath through her yoga program. The Sama Vritti Ujjayi Pranayama helps reduce her tremor and stress/anxiety levels. The tremor at times will quiet completely down with her breathing practice. The chair sequence has helped ease stress and anxiety at work. Nicole really loves Legs Up a Wall Pose and visits it often. It helps her to sleep. In fact, her children sometimes join her. Nicole has started massage therapy twice monthly.

- **New Addition to her program: Supine Supported Back Bend Sequence**

Goals: To add another restorative posture when Nicole is menstruating, to increase respiratory function, to open the heart, to reduce tightness in chest muscles.

- A. Roll a blanket 1/2 the size of a round bolster. Lie supine with back draped over bolster. The bolster will be just below the armpits, at breast level. Keep knees bent and extend arms out to sides. Close eyes, explore the sensations that arrive in this pose, breath by breath.
- B. After several breaths, turn body to side, bring upper arm over head, stretch open side intercostal muscles. Breathe here for several breaths. Turn to other side, then rest on back for several more breaths.
- C. Counter Pose: Face Down Virasana; resembles baby pose with arms extended in flexion and buttock lengthening up and back. Press hands in to mat, extend buttock up and back to elongate and neutralize spine - very good posture to relieve low back pain.

Session 4 One month later

Nicole came to the studio carrying a white and red journal in hand with big hearts all over it. The journal was proving to be a positive embellishment to her yoga program. I asked how her program was going. Nicole told me she wasn't being consistent, that her medication was making her feel too sedated. I asked if the program was too intense or demanding for her. We agreed to let go of the standing poses this session and increase non-stressful movements and breath work.

I asked Nicole to practice what we agreed on with sincere consistency (Abhyasa) for 2 weeks and to see me at the beginning of June. I read Sutras 1-12 and 1-13 and asked Nicole to reflect on the meaning of Abhyasa. In order to see consistent results from the program, a sincere practice was necessary. We agreed that I'd retest her range of motion and strength in June.

Revised Yoga Therapy Program

- **Supine Resting Position - Practice Sama Vritti Ujjayi Pranayama - 5 minutes**
- **Sacroiliac Joint Stabilization Exercise**
- **Joint Freeing Series #1-3**
- **QL Walk**
- **Joint Freeing Series #6 - as described in first program**
- **Pelvic Tilts with Abdominal Contractions**
- **Bridge - Variation 2 only**
- **Energy Freeing**
- **Savasana with Sama Vritti Ujjayi Pranayama - 10 Minutes**

Sutras 1-12 and 1-13 Yoga Sutras of Patanjali, Mukunda Stiles, Chapter 1, Pages 4-5

The vacillating waves of perceptions are stilled through consistent earnest practice and dispassionate non-attachment. Of these two, practice (Abhyasa) is the continuous struggle to become firmly established in the stable state of the True Self.

Session 5 Two weeks later

Nicole came visibly shaking today with shallow breath. Nicole's gait was also shuffled. Her medications weren't working well any longer and she couldn't wait to meet her new neurologist next month to make changes to her drug therapy. This is a common situation for PD; medications are unstable after several years of use. Upon checking, the left sacroiliac joint was moving down. After performing sacroiliac exer-

cise, both joints glided correctly. We moved to the massage table to begin Range of Motion and Muscle Strength Testing. I was unable to complete the tests because Nicole became too lethargic and her movements were heavy and slow. Instead, Nicole and I rested on the floor and practiced her yoga therapy program together. This seemed to calm Nicole, and lift her spirits. We played with a variety of movements and I offered her a supine version of part of the Joint Freeing Series asanas, along with a variety of side-lying and supine movements. After each movement exploration, I asked Nicole how it felt for her. This program reflects her approval of each movement.

Revised Yoga Therapy Program

- **Supine Sacroiliac Stabilization Exercise**

Please refer to Slava Surya Kolpakov's *Structural Yoga Therapy case study paper on Posture* for an excellent, full color illustration of this modification. This is available on the SYT web site.

- **Joint Freeing Series: Supine Explorations - # 9, 10, 11,12, 13, 14, 15**

Goals: To increase circulation, range of motion and strength to arms and hands, which have been increasingly shaky.

- **Side-Lying Arm Circles to Side - Lying Flowing Twist**

Goals: To increase range of motion, strength and circulation to the shoulder, neck and spine, to reduce vata imbalance with gentle movements, to give Nicole easy, "feel good" movements to encourage Abhyasa - sincerity in practice.

- **Joint Freeing Series # 6 - Modification 3 only from first program**

- **Bridge - "Angel Wings" - Omit program 1 bridge sequences**

Goals: To encourage circulation to the shoulder, low back and buttock, to increase hip extensor strength and hip flexor length, to continue to reduce and control sciatica, sacroiliac and low back discomfort.

Rest with heels close to buttock, feet a little more than hip width apart, palms down next to hips. Inhale, turn palms up, glide arms out to sides and over head, like angel wings taking flight, exhale, bring arms straight down to sides. Palms down. Repeat 6-8 counts. Rest. Repeat.

- **Energy Freeing - As detailed in program 1**

- **Savasana with Sama Vritti Ujjayi Pranayama - 10 minutes**

- **Restorative Postures**

Continue to enjoy either Legs Up a Wall or Supine Supported Back Bend Sequence

Session 6 Three weeks later Phone Consultation

Nicole's new neurologist adjusted her medication. He replaced the drug Sinamet and added an agonist drug, and in doing so, this created a serious psycho-physiological reaction. Nicole developed an out of control resting tremor involving her entire right side and torso. She was taken to the emergency room and given a drug for temporary relief.

Once home, she spent 2 days sleeping, exhausted from the experience. Nicole called to explain what had happened to her and asked if I could help her feel more in control. She had taken a shower and was unable to lift her leg to get out of the shower. This terrified her. This is a symptom of PD called freezing. We agreed that she would continue with the following revised program until we met in person. I included a Walking Meditation with visualization to decrease anxiety and to empower Nicole if another freezing episode came about.

Revised Yoga Therapy Program

- **Continue with Sacroiliac Joint Stabilization exercise**
- **Continue with JFS #6 as detailed in first program**
- **Continue with last session's program**
- **Walking Meditation with Sama Vritti Ujjai Pranayama**
- **Continue to enjoy restorative postures**

Session 7 One week later

Jeff drove Nicole to my home studio because she was unable to drive alone. We spent an hour together primarily talking. Nicole was feeling much stronger. Simply walking outdoors, practicing walking meditation and using her calming breath, Sama Vritti Ujjayi Pranayama, the first couple of days after the emergency room incident helped her so much. She sat quietly for a few moments.

Nicole then told me about her new diagnosis - PD. Six years ago, she had ET symptoms with a mild Parkinsonian-like tremor (described as a "pill rolling" tremor) in the right hand. PD was probably always there, but the symptoms were mild, so her first neurologist missed it. It was only when her new Doctor took Nicole off of Sinamet that he uncovered her true diagnosis - Parkinson's Disease with Essential Tremor.

We worked at a deeper level this session. I introduced Patanjali's Sutras, Chapter 2, Sutra 1. We discussed the importance of continuing with the yoga therapy program on a daily basis, especially now with a PD diagnosis (tapas/discipline), sensitizing to the tiniest signs that trigger her symptoms so that she can control them before they get too out of hand (svadhyaha/self-study) and committing to a daily spiritual practice (Isvara-pranidhanani).

We agreed that she would continue with the Yoga Therapy Program given to her in Session 5. In addition, I guided her through Vyana Pranayama. We agreed to meet in one month.

- **Vyana Prana Pranayama and Visualization - 10 Minutes**

Goals: To bring awareness to the limbs, to increase ability to move limbs when PD freezing occurs.

In supine position, begin with Sama Vritti Ujjayi Pranayama. Feel the even, rhythmic flow of the breath. Inhale, visualize the heart center receiving healing prana brought through the breath. Visualize love, light, sensation or color and breath this healing essence in to the heart. Exhale, let it out through the limbs. Continue with this practice for several breaths. Begin now to direct his healing energy out through each finger a breath at a time. Move each finger at the end of the exhalation. Continue with each toe. End this practice by breathing through the heart center and breathing out through all the limbs for several breaths.

Kriya Yoga

The practical means for attaining hiring consciousness consists of three components: self-discipline and purification, self-study and devotion to the Lord.

Mukunda Stiles, Yoga Sutras of Patanjali, Chapter 2 Page 16

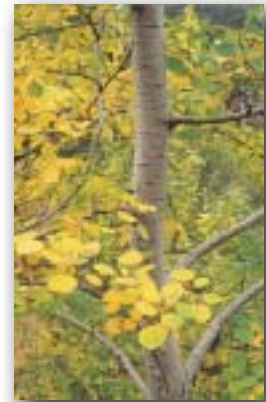
Session 8 Six weeks Later

Nicole and I met for lunch. As we greeted each other, I observed how clear and bright her eyes were. In addition, her energy level was visibly high. This was a lunch worth celebrating.

Nicole had just returned from visiting her sister in Maine. She had travelled all by herself, and shared her journey from the Colorado Springs Airport all the way to Maine and back again with me. She decided to travel on her own as a way of courageously facing her new diagnosis. The trip was a complete success. She went on to share that she started back to work two days a week and had found enjoyment spending more time with her children and Jeff. She had also started taking Tae Kwan Do classes, and found that yoga continued to be an essential daily tool for managing her PD and ET symptoms. Nicole had gone back to practicing her first yoga therapy program with consistency. She used the supine modifications when tired or wanting a gentler practice. We ended our lunch agreeing to meet in September for a final re-assessment because she was feeling so good. See Section 1b and 1c for test results.

I am so pleased by her progress. Our 6 months together has proven to be very successful. Although there have been ups and downs due to medication issues and a startling new diagnosis, PD, Nicole has evened out and has grown tremendously on a physical, energetic, emotional, intellectual and spiritual level. No new program, additions or revisions are necessary at this time.

When I first met Nicole, she called herself a shaking aspen tree. I looked in to her beautiful hazel eyes and told her, yes, you are a shaking aspen tree - an aspen tree with leaves that shimmer...golden and bright, and a root system that is solid and strong and deep. I saw her courage and strength 6 years ago and was touched to see it again today. Although the future is uncertain, she's taking it day by day, honoring and listening to her needs.



ie Summary of Results of Recommendations April 2006 to September 2006

- Remarkable reduction of hip pain after 1 week of yoga therapy. Initial pain level 9 - reduced pain level 3.
- Considerable relief of sciatica, piriformis, and sacroiliac discomfort within month 1 of program. Although these symptoms flare, they are much more manageable due to Nicole's ability to sensitize to possible flare ups and to eliminate stress triggers. Nicole continues to practice SI Joint Stabilization Exercise and finds success with it.
- Although a good increase in Range of Motion and Muscle Strength resulted from April to September, truly accurate test results are hard to depend on due to the nature of the disease and the "on-off" reality of medications, slow muscle response, and medication changes. I would not test a PD person in the future with symptoms such as Nicole's. It's too stressful and emotional for the client. With that said, I was most impressed with increased strength, although this could be due to medication change.
- More importantly, breath training was the cornerstone to this program and continues to be a positive, transformative therapy for Nicole. Sama Vritti Ujjayi Pranayama quiets, and at times, stills her tremor completely. In addition, restoratives and the JFS - especially #6 (see page 7 for modified instructions) have proven very positive in reducing Vata imbalance and bringing Koshas in to harmony. Yoga Sutras have also helped Nicole.

- Considerable stress reduction when yoga program is practiced with consistency.
- Confidence level has bloomed; examples, trip to Maine, Tae Kwan Do classes....3 times a week!

2a Name and Description Parkinson's Disease

First described by James Parkinson in 1817, PD is a progressive, degenerative, neurological condition associated with the depletion of dopamine levels within the the basal ganglia of the brain. The basal ganglia are the deep brain structures that help start and control movement. In people with PD, there is a degeneration of the basal ganglia in the deep grey matter of the brain, particularly in the part known as the substantia nigra. The substantia nigra, which connects to the striatum, contains black pigmented cells and, in normal individuals, produces a number of chemical transmitters, the most important being dopamine. Transmitters are chemicals that transmit or pass on a message from one cell to the next, either stimulating or inhibiting the function concerned. In PD, the basal ganglia cells produce less dopamine, which is needed to transmit vital messages to other parts of the brain, and to the spinal cord, nerves and muscles. The basal ganglia, through the action of dopamine, are responsible for planning and controlling automatic movements of the body, such as pointing a finger, blinking, putting on a sock, and writing or walking. If the basal ganglia are not working properly, all aspects of movement are impaired. Unfortunately, by the time the problem is noticed, most people are producing only about 20% of the dopamine they normally would, and the disease is well on it's way.

Although there are many theories about the cause of PD, the etiology remains largely unexplained. Scientists have not yet found the exact cause of PD, but researchers believe that it is a combination of factors including toxic exposures from pesticides, solvents, metals and manganese, genetic factors, dysfunction of the body's detoxification ability, free radicals and accelerated aging.

There is no known cure for PD, and symptoms worsen over the years as the brain produces less and less dopamine. There are a number of medications which help slow the progression. Yet, most medications, including Levodopa (Sinemet) lose their effect and become unreliable when taken for long periods of time. Complementary therapies including yoga are proving very helpful in the management of PD. Notable PD sufferer's include Michael J. Fox, Pope John Paul II, artist Salvador Dali, evangelist Billy Graham, boxer Mohammad Ali, and Adolf Hitler.



2a Name and Description Essential Tremor Syndrome

Essential tremor is a neurological disorder characterized by shaking hands or other parts of the body including the head. It is the most common movement disorder and affects between 1 and 6% of the population.

Unlike a Parkinsonian tremor, ET tremor is often evoked by intentional movements. In addition, PD is a chronic, degenerative disease, ET is not. Although ET is not a life threatening disease, the psycho-social effects of ET can be embarrassing and debilitating. Severity often increases over time, and increases as a person ages.



The cause of the disease is idiopathic (unknown), although about 50% of the people who have ET have genetic predisposition. Environmental toxins, which have been linked to a variety of other neurological disorders, are being linked as a very possible cause. Notable people who have been diagnosed with ET include Samuel Adams and Kathryn Hepburn.

2b. Common Gross Body Symptoms in PD Annamaya Kosha

On a gross physical level, Annamaya Kosha, common symptoms of PD progress through 5 stages, with the fifth stage being quite severe. In the early stages, symptoms are mild and increase gradually. Friends and family members may be the first to notice changes in someone with PD. The disease often begins with a slight tremor. A person is normally affected on one side of the body initially.

As the disease progresses, common gross physical symptoms may include increased tremor to both sides of the body, a "pill-rolling" movement of the index finger and thumb (pill-rolling tremor), increased muscle rigidity (bradykinesia), muscle weakness, muscle cramps, sustained muscle contractions that cause forced or twisted positions (dystonia), chronic pain, speech disorders involving decreased loudness and lack of articulation, a Parkinsonian gait; tending to lean forward while taking small, quick steps as if hurrying forward (festination), reduced swing of arms, sudden stopping when walking (freezing), trouble initiating movement (start hesitation), stooped posture, reduced rate of eye blinking, a masked face, lack of expression and animation, shallow breathing, loss of fine motor skills, drooling, constipation, urinary problems, sexual dysfunction, skin problems and insomnia.

In the later stages of the disease, a person with PD may experience dementia, an inability to stand or walk, and may require constant nursing care. PD doesn't affect everyone the same way, and the rate of progression and symptoms differs from one person to the next.

The four primary gross body symptoms of PD are:

- **Tremor**

The tremor associated with PD has a characteristic appearance. Typically, it takes the form of a rhythmic back-and-forth motion at a rate of 4-6 beats per second. As described already, it may involve the thumb and forefinger and appear as a pill rolling tremor. Tremor usually appears during sleep or improves with intentional movement. (Unfortunately, in Nicole's case, when intentional movement takes place, her ET tremor kicks in. She is constantly having to deal with either an ET or PD tremor.)

- **Rigidity**

A major principle of kinesiology is that all muscles have and work with an opposing muscle or muscle group. These two opposing muscles or muscle groups must work in harmony with one another for proper muscular movement to take place. In PD, rigidity comes about when, in response to signals from the brain, the delicate balance of opposing muscles is disturbed. The muscles remain constantly tensed and contracted. This causes pain, stiffness and weakness.

- **Bradykinesia**

Bradykinesia is the slowing down and loss of spontaneous and automatic movement. It is frustrating because simple tasks become difficult. The person cannot rapidly perform routine movements. Movements that were once quick and easy to make such as washing or dressing may take several hours.

The yogic journey guides us from our periphery, the body, to the center of our being, the Soul. The aim is to integrate the various layers or koshas, so that the inner divinity shines out as pure, clear glass.

- B.K.S. Iyengar, Light on Yoga

- **Postural Instability**

Balance is impaired and a stooped posture in which the head is bowed and the shoulders are drooped may occur. Due to rigidity and imbalance in the muscles, the skeletal structure is compromised and is pulled out of alignment. Pelvic and shoulder girdle imbalance, leg length difference, sciatica, piriformis syndrome, sacroiliac joint dysfunction and chronic neck and shoulder pain are common symptoms of PD, manifested due to postural instability. Falling often occurs as well.

2b. Common Subtle Symptoms in PD Pranamaya Kosha and The Five Prana Vayus

A key concept in Ayurveda is the life force that enters the body at birth, travels through all the parts of the body until it leaves at the moment of death. This life force is called Prana. The intelligences of Prana are called Prana Vayus. Prana Vayus function in specific areas of the body. Bringing Pranamaya Kosha in to balance is essential for subtle and gross body health.

- **Prana Vayu**

As leader to all other Pran-Vayus, it is considered the most important aspect of Vata Dosha. It nourishes the third eye and brain, and provides energy for all the other Vayus. Prana Vayu is located in the brain, chest, heart and lungs. It enlivens the ability to think clearly and gives tone to emotions, both positive and negative. It also governs the rhythm of respiration. Emotional instability including fear, anxiety, worry, depression, obsessive compulsive thinking and negative thoughts are linked to imbalanced Prana Vayu, as well as irregular breathing patterns and sleep problems.

- **Udana Vayu**

Centered in the throat and head, Udana Vayu is responsible for speech, posture, growth, effort, enthusiasm, will, memory, movement and thought. Slow, inarticulate speech, fatigue, poor posture, lack of zest, forgetfulness, confusion and movement disorders are linked to an imbalance in this Vayu.

- **Samana Vayu**

Located in the stomach and intestines, Samana Vayu controls movement of food throughout the digestive tract. It digests food, air, thought and emotions. It is a vital energy force in the navel. Constipation is a major symptom of PD, manifested through depleted Samana Vayu. In addition, proper digestive function is essential to maximize nutrient absorption. Toxicity occurs without proper digestive function. Because toxicity has been linked as a possible cause of PD, bringing this Vayu in to balance is of key importance.

- **Apana Vayu**

Located in the colon and lower abdomen, Apana Vayu is responsible for elimination of wastes, menstruation and birth. It is also responsible for the elimination of negative sensory, emotional and mental experiences. The colon is the principle seat of Vata, and imbalance of Apana Vayu is linked to constipation, sexual dysfunction, low back pain and muscle spasms, negative thoughts and emotions including anxiety and fear, all common symptoms of PD.

- **Vyana Vayu**

Located throughout the body via the nervous system, skin, circulatory system, and especially active in the limbs, Vyana Vayu is linked to tremors, stooped posture, poor gait, and stress-related emotional imbalances common to PD.

2c Related Challenges Diet

While there are no special diets required for people with PD, eating a well-balanced nutritional diet is extremely beneficial. With proper diet, bodies work more efficiently, have more energy, and medications work more smoothly.

Changing dietary habits for the newly diagnosed PD person can be very challenging. A clean, organic diet filled with a variety of fresh fruits, vegetables, lean meats, fibrous grains, legumes, nuts and breads is preferable. Because PD normally affects people 40 and older, dietary habits are well established, and a re-education is often necessary. In addition, organic foods are often costly and unavailable in abundance or quality in major grocery stores. This may dampen the ability and enthusiasm to make new dietary changes.

And he knew that food was Brahman. From food all beings are born, by food they live and into food they return.
Taittiriya Upanishad 3.2

Another dietary challenge is that certain foods interact with medicines. As an example, Levodopa, a main drug used in the treatment of PD, works best when taken on an empty stomach, a 1/2 hour before meals or an hour after meals. This allows the medication to be absorbed in the body more quickly. Levodopa may cause nausea when taken on an empty stomach. Because weight loss is a common symptom in the later stages of PD, nausea may inhibit the ability to eat well and diminished body weight may occur.

Weight gain is also of concern, especially in the early stages of PD. A person may gain weight because they are less active. Some people may eat more because they feel depressed about their situation. They feel a loss of control, and in feeling this way, they eat uncontrollably and with a lack of discernment.

Stimulating spices, foods and drinks can cause uncontrollable physical movement in people with PD. Monitoring the affect of such substances is essential. As an example, caffeine, sugar and when not taken in moderation, alcohol, can create acidity and over-stimulation to an already stressed nervous system. Alcohol, in moderation, has been proven to be affective in the reduction and calming of tremor and anxiety. However, because PD is a Vata imbalance, people with a Vata Vikruti may have addictive personalities and tendencies. Caution is advised.

A high protein diet has been linked to possible limited effectiveness of Levodopa. Limiting protein to 6 oz. a day is often recommended. Vitamin B6, found in beef, fish, liver, bananas, oatmeal, peanuts, potatoes and whole grains may interfere as well with the action of Levodopa. Careful moderation of protein intake is very important for those taking Levodopa.

On a positive note, fava beans, are a natural source of Levodopa. One-half cup contains 250 mg, or the same amount as one pill. Specific food, natural supplements, herbs and holistic Ayurvedic treatments will be addressed in the following section. Although diet is a prime related challenge in PD, with proper education, attitude and application, a healthy diet with a blend of Western and Eastern remedies can increase energy, reduce symptoms of PD, and on a deeper level, can bring the doshas, sub-doshas and koshas in to balance.

3. Ayurvedic Assessment and Ayurvedic based Recommendations

PD is considered the most serious of all Vata - deranged diseases. The term Kampavata is used in both ancient and modern Ayurvedic literature to describe PD. Because of this, Ayurvedic treatment for PD largely centers around the treatment of Vata disturbance.

In David Frawley's book, *Ayurveda and the Mind*, he states that we live in a magical world filled with great forces of life and death, creation and destruction. These forces are called Gunas and are known as sattva, rajas and tamas. Sattva means intelligence, clarity and lightness. Sattva imparts balance. Ayurveda and yoga emphasizes increasing sattva as a therapy to achieve lasting health and healing.

The pelvis is home to Vata, and health issues including chronic pain, constipation, insomnia, mental and emotional depression, headaches, weakened immune system, nervous system disorders, fear and anxiety are due to Vata imbalance. Vata is the "King" of Pitta and Kapha; it leads the doshas. When Vata is rajasic (disturbed, over active, imbalanced), all doshas are affected. Specific to Nicole's case, Pitta has been displaced considerably to the hip and sciatic nerve due to Vata disturbance. Balancing Vata with sattvic Ayurveda and yoga treatments will bring all doshas in to balance.

Specific Ayurvedic Based Yoga Recommendations

- Diet - Vata balancing with sattvic foods, oils, spices, beverages, herbs - Refer to Appendix A.
- External Oils - to balance Vata, abhyanga (Ayurvedic oil massage), to cool and pacify Pitta, coconut oil with aloe vera applied to hip joints, sacrum and buttock
- Pranayama - sama vritti ujjayi (equal wave), nadi shodhana (alternate nostril), brahmari (bee), adhyama (abdominal) so' ham (I am That)
- Guided Imagery - warming, calming, grounding, soothing, slow, steady, safe, nurturing, loving, images of nature/healing energies
- Meditation - grounding, use of calming mantras, focus on breath, Loving Kindness, Vipassana - meaning to see things as they really are, Doglen - meaning to give and receive, to transcend pain
- Regular Daily Routines - wake and sleep, meals, asana, meditation, sadhana, enjoyable activities - routine, routine, routine!
- Asana - rhythmic, slow, steady, grounded, twists, forward bends, postures that open seat of Vata/ apanasa (energy freeing), restoratives, supported inversions, long savasana, yoga nidra, focus more on breath, sensitivity training
- Positive Mind Treatments - encouragement of sattvic relationships, situations, actions, thoughts, speech, activities. Sound therapy, contemplation of Patanjali's Sutra 1.33
- Spirituality - committed daily sadhana, yoga philosophy, reflections and work - all eight limbs, Sutras 1.2-4, 2.1 and 1.12-14, as a springboard, enhance spiritual relationships, read sacred texts, pray, be of service, give, give, give!

4. Common Body Reading

Common body reading for PD includes a Parkinsonian posture; the body leans forward. Tightness in the tibialis anterior, psoas, rectus abdominus and weakness in the gluteus maximus and erector spinae muscles can create this postural imbalance. Rounded shoulders are due to tight pectoralis and serratus anterior muscles and weak latissimus and middle/low trapezius muscles. A tilted, rotated head can be caused by tight SCM and upper trapezius muscles. The same muscles may be weak on the other side. Feet turned outward indicate tight psoas, external hip rotators, sartorius and gluteus maximus muscles. The TFL and gluteus minimus are weak. Visual evaluation of this case study has been detailed in Section 1a.

5. Contraindicated Yoga Practices

Because PD is a disease of Vata imbalance, any postures that are too energizing and effortful are contraindicated. As an example, hatha yoga practices including ashtanga, power/vinyasa and Bikram would charge and fatigue the nervous system. A slow, deliberate practice with focus on the breath such as viniyoga and, of course, the SYT Joint-Freeing Series are ideal.

Pranayamas that are stimulating, cooling and over-energizing including sitali, sitkari, kapalabhati, vigorous ujjayi, surya bhedana, and bastrika are not recommended. A slow, gentle ujjayi pranayama may be used.

Foods that are impure, inorganic, overcooked and processed should be avoided. Cold food and drink encourages Vata imbalance. Warmth is needed. In addition, herbs, spices, foods and liquids that are too

stimulating including caffeine, alcohol, black tea, ginseng, spicy salsas and more affect the nervous system negatively.

Inactivity is a huge contraindication to PD. It is essential for the PD person to embrace a life-long commitment to exercise due to the debilitating nature of the disease. See section 6C.

In summary, any activity, thought, action, situation, person, food or liquid that brings about stress to the nervous system should be eliminated.

Please refer to Page 8-9 for general contraindicated yoga practices for Sciatica, Piriformis and Sacroiliac discomforts.

6. General Recommendations for the Condition

a. Therapeutic - Pain Free - Developing Sensitivity Skills

Because PD is a disease of Vata disturbance, breath training is an essential initial treatment. Begin with simple breath training. Monitor where prana is stagnant. Encourage the client to cultivate a loving, daily relationship to the breath. Simple breath awareness is the key to reduction of Vata and pain. Once breath training is well underway, gentle physical movements with breath are fabulous for the reduction of pain. Partial adaptation of the Joint Freeing Series (JFS) in supine position is soothing, comforting, pleasant and deeply relaxing. This therapy increases Kapha, decreases Vata, and cools Pitta. Client may be able to perform JFS as instructed on pages 132-133 of Mukunda Stiles' Structural Yoga Therapy book. Adapt this sequence to the needs of the individual. In this stage of the treatment, focus on teaching "sensitivity" skills. For people in pain, Avidya is in full bloom. Avidya means ignorance and disconnection to the One True Source, God. Avidya is the springboard to manifestation of disease. Through sensitivity training, the client learns to connect with and trust their higher power. In doing so, they find themselves, and embrace God. Development of trust in this stage between client/therapist is essential.

b. Stabilization - Developing Discernment Skills

Once free of pain, begin to strengthen, stretch or release muscles, based on the results of postural reading, Range of Motion, Muscle Testing and palpation results of first session. If client is unable to test in full, test in parts. A few tests will lead therapist/client on the way to discovery. This process must unfold, and not be rushed or bullied. Focus on physical yoga therapy this phase. Include ways for client to "discern" what they are feeling, what they are strengthening and stretching, and if this is a good feeling for them. Get the client to learn how to care for themselves through discernment skills. Introduce yoga sutras during this phase. Continue to develop trust between client and therapist, with a firm touch.

c. Maintenance - Developing Sustainment Skills

In the management of PD, daily practice is essential. In this phase, encourage client to embrace yoga as a way of life. Continue with teaching the 8 petals or limbs of yoga. Agree to establish a quarterly therapy session with client (minimum). Due to the progression of PD, a continued relationship between client and therapist is essential. At this stage, develop a sustainable, solid, long-term relationship with client.

In summary, interwoven through each of these 3 phases, the client is encouraged to sensitize, discern and stabilize all 5 layers of the Koshas; physical, energetic/pranic, emotional, intuitive and spiritual.

7. Questions and Answers www.yogaforums.com Posted April 25, 2002

Q – from Tatiana - What practices would be feasible, useful for a person with Parkinson's disease? I took a class of 13 people with various illness, conditions (MS, brain damage, arthritis) through awareness, pranayama and very modified Asana done in a chair. There were too many to work one-on-one with the man with Parkinson's. He was shaking so violently, I put a bolster between his legs and belted his thighs. This allowed him to have some steady contact with the ground and eased the shaking in the lower extremities. I watched him still and quiet during the breathing exercises, but during the modified asanas, his body went back to the trembling. Any suggestions, words are most appreciated. Bless you. Tatiana

Answer - Parkinson's needs individual connection to the student. Maintain lots of eye contact. Make sure he knows that you are with him fully. Pranayama is the best practice to give. Not asana as they are unlikely to provide help. The difficulty is more in the subtle and mental body not physical. One needs to treat situations according to the kosha not merely asana. Asana is not yoga. Yoga is a multi-dimensional approach to a multi-dimensional person. Find out which kosha is most affected and go subtler from there. As you found in first session what makes immediate benefit is to be pursued, let other ideas float away. Teach him to have a smooth steady breath and look to your own breath to see that his state does not imbalance your own. The main need is for your compassion to match his need and keep your heart open. Mukunda

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American neurological Association www.aneuroa.org

International Essential Tremor Foundation www.essentialtremor.org

National Tremor Association www.nationaltremor.org.uk

9. Appendix A. Vata Pacifying Diet

- Eat in a calm environment.
- Never eat when upset.
- Eat food prepared by loving hands in a loving way.
- Make eating a sacred ritual. Relax and bless your food.
- Don't drink cold drinks or large quantities during a meal.
- Sip warm water during a meal; ginger/peppermint is very soothing after meals.
- Eat/chew consciously and slowly.
- Eat until 3/4 full.
- Sit quietly for a few minutes after your meal to encourage digestion.
- Dairy - all dairy products pacify Vata. Always boil milk before you drink it, and drink it warm. Don't drink milk with a full meal.
- Allow 3 hours between meals to encourage food to digest.
- Favor sweet, sour and salty foods in general.
- Sweeteners - all sweeteners are good (in moderation) for pacifying Vata.
- Grains - rice and wheat are very good. Reduce intake of barley, corn, millet, buckwheat, rye and oats.
- Fruits - favor sweet, sour, or heavy fruits, such as oranges, bananas, avocados, grapes, cherries, peaches, melons, berries, plums, pineapples, mangos and papayas. Reduce dry or light fruits such as apples, pears, pomegranates, cranberries, and dried fruits.
- Vegetables - beets, cucumbers, carrots, asparagus and sweet potatoes are good. They should be cooked, not raw. The following vegetables are acceptable in moderate quantities if they are cooked, especially with Ghee or oil and Vata reducing spices: peas, green leafy vegetables, broccoli, cauliflower, celery, zucchini and potatoes. It's better to avoid sprouts and cabbage.
- Spices - cardamom, cumin, ginger, cinnamon, salt, cloves, mustard seed and small quantities of black pepper are acceptable.
- All nuts are good. Soaking almonds in milk is best for digestion.
- Beans - reduce all beans, except for tofu and mung dahl.
- Oils - all oils reduce Vata. Sesame is an excellent choice.
- Herbs: Kappikacchu has received a lot of attention in the treatment of PD. This herb contains L-dopa within its seeds. Ashwangha decreases Apana Vayu disturbance. Gotu Kola and Saint John's Wart are used to reduce depression. Triphala increases digestive health. I recommend a PD person consult first with their primary healthcare professional before exploring Ayurvedic herbs due to drug therapy and potential for interference.

9. Appendix B. Testimonial Nicole Freeman February 2007

Parkinson's Disease and Essential Tremor can be devastating conditions. When I was first diagnosed with PD, I was overwhelmed and thoroughly distraught. I've learned to face ET and now PD with determination, acceptance and courage. Each day presents a new challenge. My motto is "never surrender." I climb over, under, on top of, around and even between PD, using yoga as a primary resource in the management of my symptoms. Beth and Structural Yoga Therapy have helped to empower and transform my life. I simply don't allow Parkinson's or my Essential tremor to control me. The disease doesn't own me. I own it, and although I have my up days and my down days, I can always count on yoga to lift my spirits, to calm my mind and to strengthen and refresh me. I highly recommend and advocate yoga for the PD person and thank Beth and Structural Yoga Therapy for instilling a life long love of Yoga.

10. Biography

Beth McCarthy is a professional level yoga teacher and therapist who partners with and supports people with movement restrictions, musculo-skeletal imbalance and chronic or life threatening health challenges. She is a graduate of the Temple of Kriya Yoga in Chicago and a student and graduate of Mukunda Stiles' Structural Yoga Therapy program. A native of Chicago, Beth now resides in sunny Colorado with her family, Dennis, Savanna, Bria, Maeve and Brennan, the lights of her life. Beth teaches yoga throughout the community, has a successful private yoga therapy practice and is a teacher trainer for Lahiri School of Yoga, a 200 hour RYT teacher training program. When not teaching yoga, leading workshops or tending to her family, Beth loves to hike in the mountains, breathe in nature, make paper and journals, cook gourmet meals, read poetry, be with friends, and of course, study and practice yoga.

This paper, with deep love and respect, is dedicated to Nicole and Dennis.

Namaste.

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