

Yoga for Traumatic Brain Injury

By

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L is a 28-year-old woman who sustained a traumatic brain injury from a car accident at the age of 19. She spends the majority of her waking hours in a wheelchair. At the time of the accident, L was riding as a passenger in a stolen car.

Stresses:

1. L's condition stresses the physical body in terms of abnormal pressure on the joints, lack of mobility, and poor posture, as well as shallow respiration, leading to excess tension in the muscles.
2. Psycho-socially, L experiences stress from her inability to accept her "new" body and personality and to find meaning in how her life is now. She expresses that if she cannot walk again she would rather die. She mourns the loss of her dreams of finding a mate and living on her own as other women her age do.
3. Cognitively, her short-term memory loss also becomes a source of constant stress in her inability to process and learn as she did before the accident.

Separation at the Level of the Koshas:

L experiences many physical manifestations of her injury that contribute to her experience of separation at each level of the koshas. Some of these physical manifestations are common to many with traumatic head injury while others are unique to Lynn.

Annamayakosha (physical body): Decreased ROM in several joints, decreased strength, poor motor control, abnormal positioning of right wrist into flexion, abnormal gait, abnormal tone in the body, decreased respiration, seizure, depression, speech impairment, abnormal posture, decreased proprioception and kinesthetic sense, personality change, decreased social appropriateness, intermittent shaking in the arms and legs, decreased safety and judgment, emotional regression, flat affect, decreased short-term memory, attention, focus, and sequencing, decreased creativity, separate from parts of physical body that don't work properly.

Pranamyakosha (energy body): Lack of awareness of prana and breath, displaced energy channels.

Manamyakosha (psycho-emotional body): Separation from family, work, cultural, and societal roles and relationships, separation from her own emotions, thoughts, and intuition.

Vijnyanamayakosha (wisdom body): Belief that if she cannot walk again she is useless; that her injury was done to her; that she is a victim rather than a participant in the event that caused her injury; that she does not belong in the work environment she is in with other disabled persons; separation from awareness of these limiting beliefs.

Anandamyakosha (spirit body): Separation from her sense of destiny and purpose; separation from a spiritual connection; because she lives in the past (pre-accident) and otherwise lives moment to moment due to short-term memory loss, she gets stuck in an endless loop of regret; her separation from her witness body makes her unable to see this pattern.

Benefits of Yoga:

1. Increasing her flexibility, strength, and position sense (physical body)
2. Chakra balancing, especially at the lower three chakras (energy body)
3. Increasing her overall connection to herself at all levels of the koshas.
4. Increasing self-confidence, self-esteem, and self-awareness to be able to move forward in her life (psycho-social)

5. Enabling her to find greater purpose and mission in life (spirit body).
6. Hopefully increasing the witness body (wisdom body)

Contraindications:

1. Poses involving weight bearing on the right wrist with wrist in extension due to abnormal joint position
2. Asymmetrical standing poses due to leg weakness and pelvic instability
3. Standing poses without the support of a wall due to poor balance and motor control
4. Vinyasa flow due to poor motor control
5. Caution should also be used in pranayama to avoid releasing too much energy to the head that may lead to psychological disturbances, such as psychosis or depression.

Objectives:

1. Increase L's awareness at all levels of the koshas
2. Enable L to feel more at home in her body
3. Increase improvement in physical functioning to enable L to move more easily
4. To increase L's self-esteem and sense of personal power to move forward in life
5. Increase L's awareness at all levels of the chakras and to balance the first three chakras
6. To help L experience healing and self-love regardless of whether she walks again or not.

Weekly classes:

- #1: Intake and 1st Chakra Balancing
- #2: 2nd Chakra Balancing
- #3: 3rd Chakra Balancing
- #4: Dosha Assessment & 4th Chakra Balancing
- #5: 5th Chakra Balancing
- #6: 6th Chakra Balancing
- #7: 7th Chakra Balancing
- #8: Integrating the Chakras

*Focus will remain on the lowest chakra until it is fully integrated; then therapy will focus upward one chakra at a time. Progression will depend on the client.

Week 1 Intake and Balance of the 1st Chakra

Objectives: To assist L in increasing awareness of her first chakra, teach the use of mulabhandas; increase grounding.

Supplies needed: Mat, chair, bolster, 4 blankets, chime, intake form, body map, markers.

- I. Intake
 - A. Use Personal History Form in interview format.
 - B. Modify questions to make them as simple as possible.
 - C. Keep interview short and simple due to L's short attention span.
- II. Centering
 - A. 1 Chime to indicate the beginning of the session.
 - B. Modified 3-part breath mudra in supine

1. Have L breathe into hands on abdomen
 2. Have L breathe into hands on lower lungs
 3. Have L breathe into hands on upper lungs
- III. Body Scan
- A. Move from toes to feet to ankles, etc.
 - B. Have L draw experience on body map
 - C. Let L share her experience verbally
- IV. Help L move to sitting on a bolster on the floor
- A. This is assuming you know that she and you can safely make this transition
 - B. Important to move her from her wheelchair to enable her to experience life without it.
 - C. Ask her how you can best help her
 - D. Make sure your own body mechanics are safe
 - E. Support her gently to the floor sitting on a bolster
 - F. Place bottoms of feet together in very loose butterfly to achieve neutral spine.
- IV. Mudras for the chakras
- A. Hasta Mudra #6 to balance all chakras
 1. Tips of fingers touching
 2. Thumbs and index fingers “bridging” the heart
 3. IF she cannot do the bridging without straining, ask her to touch the fingers together in front of her heart.
 4. You may need to assist her in obtaining and maintaining the position.
 5. Ask her to notice where her breath is flowing.
 - B. Hasta Mudra #1
 1. Little fingers touching
 2. May need to put client into mudra and support her in maintaining it
 3. Ask her to notice where she feels the breath flowing
 4. Perhaps have her go between #6 and #1 to notice the difference.
- V. Warm-Ups
- A. Shoulder rolls
 - B. Cat/Dog tilts
 - C. Eye movements
 - D. Shoulder flex with breath
 1. Up on inhale with her left hand assisting her right
 2. Encourage her to release her hold on the right and to allow the arms to descend together on the exhale.
 3. Place mirror in front of L for feedback on posture and positioning
 - E. Seated side-bending
 - F. Seated twist
 - G. Hip internal/external rotation
 - H. Heel slides (hip and knee flexion and extension along the floor)
 1. First teach mulabandha which may not be successful the first time
 2. Support at the pelvis to prevent her from tipping backwards
 3. Emphasize pairing breath with movement.
 4. May need to assist the movement along the floor
 - I. Foot flexion/extension/rolling
- VI. Asanas for 1st Chakra (security)
- A. Mulabandha
 - B. Frog

- C. Butterfly
 1. Do in reclining position due to tightness in hips and lack of pelvis stability + to increase grounding.
 2. Have L slide down in front of bolster; remove bolster and ease back to position on her back.
 3. Place supports under knees and roll under head.
 4. Have L flap her knees like the wings of a butterfly.
 5. Encourage breath awareness.
- D. Bridge
- E. Knee to chest
- F. Knee drops
 1. Modify by having her roll completely to one side then reaching back for twist (to avoid too much uncontrolled twist to the lower back)
 2. Place support under head.
 3. Place support under arm reaching back into the twist.
 4. Encourage breathing.
- G. Reclining tree
- H. Reclining eagle
- I. Tortoise
- J. Chair pose against the wall
- K. Forward Bend against the wall
- L. Supported inversion to balance all the chakras
 - A. Very slight decline to avoid over-stimulating vata
 - B. Use a bolster under the hips and legs, a folded blanket under the torso, and a thinner blanket with a roll under the neck. Place folded blankets under the upper arms for support.
 - C. Ask L to once again perform hasta mudra #1 with assistance as needed.
- VII. Guided imagery in inversion (see handout of guided imagery)
 - A. Journey from the head to the 1st chakra
 - B. Incorporation of colors, sounds, and elements associated with the 1st chakra.
 - C. Hasta Mudra #1 (see VI-C above)
- VIII. Savasana
- IX. Help L back to seated position
 - A. Ask her to roll on her right weaker side
 - B. Ask her to come up onto right elbow and to push with the left hand
 - C. Assist to sitting
 - D. Have her press into the floor to lift to sit on the bolster
 - E. Steady her so that she does not fall over.
- X. Sharing
- XI. Chime to end session
- XII. Help L back up to chair
 - A. Assist L in coming off bolster onto knees
 - B. Have her lead with right foot to come up to standing with hands on wheelchair
 - C. STABILIZE chair so that it doesn't tip.
 - D. Assist her to turn and sit in the chair.

GUIDED IMAGERY FOR TBI CLIENTS

Lay supine with the hands in place for the Hasta Mudra # 1. Allow the client to become comfortable in a low inversion, preferably bolstered and positioned to last for about 10-15 minutes. Assistance to start the Mudra is fine and the client can also be bolstered or propped as to keep the Mudra even if laying it on the belly with the elbows propped out as if seated. The client may relax the arms down to the side and restart the Mudra at anytime they feel their bodies may fatigue or increase in spasticity, though the supported Mudra would be best for the effects of breathing in the Mudra during the guided imagery.

Close the eyes and relax. You are going to take a journey from the brain to the energy center at the base of the spine.

To start the journey, the breath must be slow and constant, in and out and in and out. Each breath out allows the deepening of the muscles of the back and bottom and legs to relax and melt toward the earth. As the exhale gets deeper and longer, allow the eyes to stay closed and focus the inner mind on the brain. Be in your brain, in your mind. In it is a ship and you are the pilot for that ship. You board that ship by breathing slowly outward and the doors open and you enter through them.

The ship moves with the breath and every breath in and out allows the ship to move in any direction you want. But on the next slow exhaling breath allow yourself to guide the ship to the back of your head. From there the breath allows the ship to slowly follow the spine, first down behind the throat, behind the chest and heart and behind the stomach, then behind the kidneys and behind the waist and then into the deep end of the spine.