

Reducing the Physical and Emotional Symptoms of Brain Injury with Massage Therapy



Jill Jenks, LMT

Graduated First School of Therapeutic Massage – Dec, 2009
Graduated FPM – Advanced Medical Massage – June, 2010
Level 1 Ball Practitioner
Specializing in Therapeutic Massage for TB, SCI, Amputees and Catastrophic Orthopedic Injuries since 2010
Director of Massage Therapy, Functional Therapy Unlimited – Oct, 2010 to Present

What do Massage Therapists Do?

What the world thinks I do



What I actually do



Spa Massage vs. Therapeutic Massage

Designed for Relaxation



Designed for Healing



Understanding of Massage Modalities and the benefits provided

Basic Swedish Massage

Most basic massage service. Stroking, kneading and tapping to warm and relax tissue and increase blood flow. Can gently reduce muscle strain, pain, anxiety and depression while improving movement and flexibility. May temporarily reduce blood pressure and blood sugar.



Effleurage



Petrissage



Tapotement

Deep Tissue Massage

Works deeper into tissue layers. Addresses "knots" and deep muscle tissue stiffness. Works deep scarring, particularly around surgery sites. Generally addresses a specific area instead of a broader range.



Deep Tissue



Trigger Point



Neuromuscular Stripping

Research regarding Massage Therapy

Impact of Massage Therapy on Fatigue, Pain and Spasticity in People with Multiple Sclerosis: a Pilot Study¹

- Tracked fatigue, pain, & spasticity
- Patient overall health and quality of life
- BSM 1x/wk for 6 weeks
- Reduction in all symptoms
- Improved perception of health and quality of life

Massage Therapy Treatment and Outcomes for a Patient with Parkinson's Disease: a Case Report²

- Tracked tremors associated with Parkinson's Disease
- BSM 5x over 6 weeks
- Reduction in tremors

Manual Massage Therapy

Connective Tissue Massage

- Also known as Myofascial Release
- Works fascia (substance which connects and separates all bones, muscles, nerves, blood vessels, etc.) to improve movement and decrease pain



Tractioning

- Subtle, steady force applied to head/neck, arms and/or legs to reduce myofascial restrictions and gently stretch muscle tissue



Manual Massage Therapy

Lymphatic Drainage

- Works the tendons (connects muscle to bone) and ligaments (connects bone to bone)
- Improves ROM



Scar Release

- Promotes new skin growth to reduce puckering of skin
- Releases scar from underlying tissue, improving movement



Research regarding Manual Massage

Concussion Treatment Using Massage Techniques³

- Tracked concussion symptoms including balance
- Tracked cervical postural deviation and ROM
- Massage 2x
- Reduced concussion symptoms
- Improved balance
- Improved cervical ROM

Specialized Modalities

Bowenwork

- Light pressure and rolling movements on muscles, tendons and fascia
- Stimulates proprioceptors (nerves that respond to position and movement). Initiates nerve reflex signals.



Cranial Sacral Therapy

- Gentle, noninvasive form of bodywork that addresses the bones of the head, spinal column and sacrum.
- Release compression in those areas to alleviate stress and pain.



Specialized Modalities

Thai & Shiatsu

- Kneading, pressing, soothing, tapping, and stretching
- Performed without oils through light, comfortable clothing.



Qigong or Tai Chi

- Gentle exercise composed of movements that are repeated a number of times
- Stretches the body, increases fluid movement and awareness of movement of the body



Research regarding Specialized Modalities

Bowenwork for Migraine Relief: A Case Report¹

- Tracked incidence of migraines
- 14 Week study
- No migraines by Week 12
- No pain by Week 13
- No pain meds by Week 14

Effects of Traditional Japanese Massage Therapy on Various Symptoms in Patients with Parkinson's Disease: A Case-Series Study²

- Tracked gait speed for ambulatory patients
- Tracked ROM reduced by Frozen Shoulder Syndrome
- Improved gait speed
- Improved ROM

Research regarding Specialized Modalities

Treatment of Tactile Impairment in Young Children with Autism: Results with Qigong Massage³

- Tracked touch in 97 patients with Autism
- Daily by parents; Weekly by therapist
- 25-35% Improvement in touch

Zen Shiatsu: A Longitudinal Case Study Measuring Stress Reduction in a Child with Autism Spectrum Disorder⁴

- Tracked stress related to Autism
- Zen Shiatsu 20 min/wk for 6 wks
- Immediate stress reduction Week 1 beginning at 4/5 to 2/5 at end of first session
- Week 6 reduction beginning at 3/5 to 1/5 at end of session

Complimentary Modalities

Reiki

- Energy balancing technique
- Addresses energy centers of the body
- Practitioner may work with hands lightly on body or above energy center



Infra-Red Technology

- Increases circulation
- Temporarily reduces muscle & joint pain, muscle spasms and muscle strains



Complimentary Modalities

Aromatherapy

- Aromatic oils and oil blends used to create a different atmosphere
- Can relax or energize
- Can also be derived from candles and diffusers



Music

- Can be any type of music from nature sounds to classical to rock or rap
- Can relax or energize
- Totally individualized



Research regarding Complimentary Modalities

Significant Improvements in Cognitive Performance Post-Transcranial red/Near Infrared Light-Emitting Diode Treatments in Chronic, Mild TBI⁵

- Tracked symptoms of PTSD, inhibition and verbal learning
- 11 patients w/TBI
- Infrared treatment 3x/wk for 6 weeks at 20 minutes/session
- Reduction in PTSD symptoms and inhibition
- Improved verbal learning

Lavender oil preparation Siterax is effective in generalized anxiety disorder – a randomized, double-blind comparison to placebo & paroxetine⁶

- Tracked Generalized Anxiety Disorder
- 539 patients; double-blind study for 10 weeks
- Reduced GAD
- Improved overall physical health

Research regarding Complimentary Modalities

The Effects of Music on The Human Stress Response 11

- Tracked cortisol levels related to stress
- 60 patients for 25 minutes
- Relaxing music, water sounds or none
- Pre-stress music – cortisol levels higher after music
- Post-stress music – cortisol levels decrease with music

How Massage Therapy can address the emotional and/or psychological symptoms of brain injury

Anxiety and/or Agitation

- Ask client how they are and just listen
- Therapist will speak softly and slower than usual
- Ask others to leave the area, especially if they are causing stress
- Dim the lights
- Put on music the client finds restful
- Use relaxing scents if the client is not opposed to them
- Work with long, deep, purposeful strokes
- Redirect client to things that make them happy and peaceful



Depression

- Ask client how they are and just listen
- Therapist will be bubbly and upbeat
- Involve others, especially if they make the client happy
- Turn up the lights
- Put on music the client finds energizing
- Use invigorating scents if the client is not opposed to them
- Work with short, light, rapid strokes
- Redirect client to things that make them happy and energetic



How Massage Therapy can address the physical symptoms of brain injury

Headaches

- Ask client how they are and just listen
- Therapist will be quiet and speak softly
- Ask others to leave to keep noise levels down
- Turn down the lights
- Put on music the client finds relaxing, or work in silence
- Work facial muscles as well as neck muscles
- Consider the use of Cranial Sacral Therapy



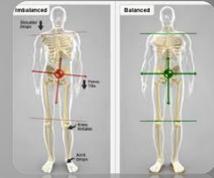
Spasticity and Contracture

- Ask client how they are and just listen
- Create an environment that is pleasing to the client
- Work the muscle bodies associated with the areas of spasticity or contracture
- Use slow, static stretching to reduce the symptoms
- Use resistive techniques to improve stretching
- Actively demonstrate the time it takes to stretch appropriately



Gait and Balance

- Ask client how they are and just listen
- Watch client walk as they come for services
- Have the client stand near a wall near a vertical line to assess posture. Can be done lying down as well
- Address postural issues by working muscles
- Do active and resistive stretching
- Use tractioning



Self-Help Massage Tips, Tools and Techniques

Self Massage

- Basic Swedish Massage
- Trigger Point Massage
- Deep Tissue Massage
- Stretching
- Qigong
- Hot/Cold Packs
- Infra-red Therapy
- Aromatherapy
- Music Therapy



Stretching

- Static Stretching
- Active Stretching
- Resistive Stretching
- Qigong
- Yoga



Massage Tools

- Tennis Balls
- Foam Rollers
- Bongers
- Exercise Ball
- Trigger Point Tools
- Infrared Lights
- Hot Packs
- Ice Cups



Aromatherapy, Lighting and Music

- Figure out what makes you calm and peaceful
- Use scents you like
- Adjust the lighting to meet your needs
- Put on music that inspires you



How to find qualified LMT's for working with individuals with brain injury

Licensed by the State of Michigan

- All Massage Therapists practicing in the state of Michigan are required to be Licensed
- All Massage Therapists should have liability insurance
- All Massage Therapists should be willing to show you a copy of their current license and insurance certificate
- Licenses can be looked up online at www.MI.gov/LARA to see if there are any issues



References for Qualified LMT's

- Contact local massage schools for references
- Contact AMTA
- Contact current rehab providers
- Contact current health care providers
- Contact your case manager
- www.irenes.edu
- www.fstm.com
- www.dorsey.edu/massagetherapy
- www.everestinstitute.edu/massage-therapy
- www.amtamichigan.org

Interviewing Prospective LMT's

- What training do they have?
- What experience do they have with clients with a brain injury?
- Do they take a complete medical history?
- Will they allow family members or caregivers to be present during the massage?
- How do they handle inappropriate behavior?
- Take the time and find the right LMT
- Communicate with your LMT – let them know what you need or want
- Remember, the LMT is there for the client. Their needs and wishes come first
- GET MEDICAL CLEARANCE FOR MASSAGE BEFORE YOU SEE A MASSAGE THERAPIST**

Questions?

Research References

- 1) Gustafson, S. (2016) Bowenwork for Migraine Relief: A Case Report. *IJTB - International Journal of Therapeutic Massage and Bodywork*—Volume 9, Number 1, March 2016
- 2) Burns, S. (2015) Concussion Treatment Using Massage Techniques: A Case Study. *IJTB - International Journal of Therapeutic Massage and Bodywork*—Volume 8, Number 2, June 2015
- 3) Donoyama, N. & Ohkoshi, N. (2012) Effects of Traditional Japanese Massage Therapy on Various Symptoms in Patients with Parkinson's Disease: A Case-Series Study. *The Journal of Alternative and Complementary Medicine* Volume 18, Number 3, 2012, pp. 294-299
- 4) Backus, D., Marnella, C., Bender, A & Sweatman, M. (2016) Impact of Massage Therapy on Fatigue, Pain, and Spasticity in People with Multiple Sclerosis: a Pilot Study. *IJTB - International Journal of Therapeutic Massage and Bodywork*—Volume 9, Number 4, December 2016
- 5) Casciaro, Y. (2016) Massage Therapy Treatment and Outcomes for a Patient with Parkinson's Disease: A Case Report. *IJTB - International Journal of Therapeutic Massage and Bodywork*—Volume 9, Number 1, March 2016

Research References

- 6) Silva, L. & Schalock, M. (2013) Treatment of Tactile Impairment in Young Children with Autism: Results with Qigong Massage. *IJTB - International Journal of Therapeutic Massage and Bodywork*—Volume 6, Number 4, December 2013
- 7) Burke, A. (2014) Zen Shiatsu: A Longitudinal Case Study Measuring Stress Reduction in a Child with Autism Spectrum Disorder. *IJTB - International Journal of Therapeutic Massage and Bodywork*—Volume 7, Number 4, December 2014
- 8) Naesser, M.A., Zafonte, R., Krengel, M.H., Martin, P.L., Frazier, J., Hamblin, M.R., Knight, J.A., Meehan II, W.P., & Baker, E.H. (2014) Significant Improvements in Cognitive Performance Post-Transcranial, Red/Near-Infrared Light-Emitting Diode Treatments in Chronic, Mild Traumatic Brain Injury: Open-Protocol Study. *Journal of Neurotrauma* 31:1008–1017 (June 1, 2014)
- 9) Kasper, S., Gastpar, M., Müller, W.E., Volz, H., Moller, H., Schlafke, S., Dienel, A., (2014) Lavender oil preparation Silexan is effective in generalized anxiety disorder – a randomized, double-blind comparison to placebo and paroxetine. *International Journal Neuropsychopharmacol* (2014) 17 (6): 859-869
- 10) Thoma MV, La Marca R, Brönnimann R, Finkel L, Ehler U, Nater UM. The Effect of Music on the Human Stress Response. *Newton RL, ed. PLoS ONE.* 2013;8(8):e70156. doi:10.1371/journal.pone.0070156.

Thank You!