

Massage for Headaches and Neck Pain Home Study Course

9 CE Credit Hours
Online Study Guide

Presented by the:
Center for Massage Therapy Continuing Education

*PO Box 117 • Elk Point, SD 57025
866-784-5940 • www.massagetherapyceu.com*

Table of Contents

INSTRUCTIONS	3
EXAM (for review before taking the online exam).....	4

Center for Massage Therapy Continuing Education

© 2009, Center for Massage Therapy Continuing Education
PO Box 117
Elk Point, SD 57025
www.massagetherapyceu.com
Ph: 866-784-5940 • Fax: 605-761-2261
info@massagetherapyceu.com

Published by the Center for Massage Therapy Continuing Education

The author grants permission to photocopy this outline for personal use only. Beyond this consent, no portion of this outline may be copied or reproduced in any form without written permission from the Center for Massage Therapy Continuing Education.

It is the responsibility of the practitioner to determine the appropriateness of the principles presented in terms within the scope of practice. This information is in no way meant to diagnose or treat medical conditions. This course is not meant to teach advanced hands-on massage techniques. Written medical opinions are always the best way to resolve any questions regarding contra-indications to massage therapy.

PLEASE CAREFULLY READ THE DIRECTIONS ON PAGE 2

Instructions for the Massage for Headaches and Neck Pain Home Study Course

Thank you for investing in the Massage for Headaches and Neck Pain home study course, a 9 CE credit hour course designed to further your knowledge in the theory and practice of assessing and treating headaches and neck pain. This guide will contain all of the instructions you will need to complete this course. This is a 9 CE hour course, so that means it should take you approximately 9 hours to read the text, watch the instructional DVD-ROM, complete the exam and course evaluation.

In this course you will be presented with information on:

- Common types of headaches
- Neck pain and dysfunction
- Assessment strategies for headaches and neck pain
- Medical treatment strategies for headaches and neck pain
- Therapeutic massage modalities to treat headaches and neck pain
- Benefits and contra-indications of massage application to the head and neck

The following are steps to follow in completing this course:

- 1. Read the instructions and review the textbook, DVD-ROM and exam. Your textbook and DVD will be mailed to you.**
- 2. Access the online examination in your account at www.massagetherapyceu.com.**
- 3. Complete your examination and print your certificate. The exam is open book and there is no time limit for completion.**

You must pass the exam with an 80% or better to pass this home study course. Feel free to review the textbook and DVD-ROM while taking the test. This course uses the textbook “A Massage Therapists Guide to Treating Headaches and Neck Pain”, by Sandy Fritz and Leon Chaitow. There are no trick questions on the exam. All of the answers can be found in the textbook. Good luck as you complete this course. If you have any question please feel free to contact us at 866-784-5940, 712-490-8245 or by email at info@massagetherapyceu.com.

It is advised to answer the exam questions in the study guide before testing online. That way, when you are testing you do not have go back and forth through the online exam and risk losing your answered questions!

Most state boards require that you keep your “proof of completion” certificates for at least four years in case of audit. Thank you for taking our Massage for Headaches and Neck Pain home study course.

Massage for Headaches and Neck Pain Examination

Chapter 1: Headache types and neck pain and dysfunction

1. Headaches can be caused by many things including which of the following?
 - A. Stress, muscles tension and/or chemical imbalance
 - B. Nutritional disruption, medication side effects and/or vascular dysfunction
 - C. Sinus disorders and/or tumors
 - D. All of the above are possible causes of a headache
2. The two basic types of headaches are _____ and _____.
 - A. Vascular and tension
 - B. Ringing and tension
 - C. Stress and ringing
 - D. Vascular and migraine
3. Which of the following type of headache is massage most effective for?
 - A. Vascular
 - B. Tension
 - C. Migraine
 - D. Cluster
4. What is a secondary headache?
 - A. A category of headache which is not due to an underlying cause
 - B. A category of headache which is caused by tension
 - C. A category of headache which is due to an underlying cause
 - D. A category of headache which has no structural etiology
5. Individuals with all of the following headache symptoms need to be immediately referred for prompt medical care EXCEPT:
 - A. Sudden, severe headache with or without a stiff neck
 - B. Headache with associated fever, convulsions or with pain in the eye or ear
 - C. Gradual onset headache following a period of stress
 - D. Headache following a blow to the head
6. Which of the following is a cause of a tension-type headache?
 - A. Muscle tendon strain and trigger point development at the attachment of the trapezius and neck muscles
 - B. Old injuries or trauma to the neck
 - C. Strain in the temporomandibular joint (TMJ) muscle complex
 - D. All of the above can cause a tension-type headache
7. About _____ migraine sufferers experience a migraine with an aura.
 - A. 1 in 10
 - B. 2 in 5
 - C. 3 in 10
 - D. 1 in 5

8. All of the following are a type of migraine with out aura EXCEPT:
 - A. Cluster migraine
 - B. Ophthalmoplegic migraine
 - C. Retinal migraine
 - D. Menstrual migraine

9. In the muscle structure of the neck, what are “local” muscles?
 - A. Deep muscles of the neck that produce fine precise movement and stability
 - B. Superficial muscles of the neck which are involved in large movements
 - C. Intermediate muscles that are located in the anterior neck only
 - D. Muscles which connect to the upper limbs

Chapter 2: How headaches and neck pain occur, and when is pain a sign of a serious condition

10. What is breathing pattern disorder (BPD)?
 - A. Breathing in deficiency based on activity
 - B. Breathing incompletely based on activity
 - C. Breathing in excess of need based on activity
 - D. Holding the breath unconsciously

11. Which of the following is considered a vascular headache trigger?
 - A. Food or additives in food
 - B. Poisons
 - C. Medication or stress
 - D. All of the above can be triggers for a vascular headache

12. All of the following can be causes of neck pain EXCEPT:
 - A. Flickering or glaring lights
 - B. Postural dysfunction
 - C. Sleeping on the stomach or with too soft or large of pillow
 - D. Nerve injury or nerve impingement from surrounding soft tissues

13. Which of the following is an example of when you should refer your client to another health care provider?
 - A. A client with a gradual onset headache which feels like a taught band around their head
 - B. A client with neck pain described as severe and shooting down the arm with numbness
 - C. A client who suffers from occasional migraine headaches who has been recently treated by their physician
 - D. A client with moderate neck pain who states they sleep on their stomach regularly with no significant medical history

Chapter 3: Medical treatment for headaches and neck pain and implications for massage application

14. Why is understanding the diagnostic process and the target of medical treatments important to massage therapists?
 - A. So the massage therapist can make an accurate diagnosis of the client’s condition
 - B. It is not important for a massage therapist to be familiar with medical treatments
 - C. So that the massage application can support specific medical treatment
 - D. All of the above

15. The diagnostic process includes all of the following EXCEPT:
- A. History taking
 - B. Physical exam
 - C. Diagnostic imaging
 - D. Massage treatment
16. What caution should massage therapists take when treating clients taking muscle relaxants and/or antidepressants for chronic muscle-contraction headaches?
- A. Caution is required to avoid masking any adverse reactions to the medications
 - B. Caution is required to avoid overstretching tissue since protective mechanisms are inhibited
 - C. Massage therapy is contraindicated for clients taking prescription medication for headaches
 - D. Caution is required to avoid working the tissues deep enough to interrupt the client's pain cycle
17. Which of the following is a non-medication modality for treating headaches and neck pain?
- A. Transcutaneous electrical nerve stimulation (TENS)
 - B. Manipulation
 - C. Massage therapy
 - D. All of the above

Chapter 4: Pain

18. Which of the following is a possible cause of soft tissue pain?
- A. Chemical factors such as chemicals released from illness or injury
 - B. Mechanical factors such as cumulative stress or micro-irritation
 - C. Thermal factors such as extreme heat or cold
 - D. All of the above
19. All of the following are characteristics of nociceptors EXCEPT:
- A. Nociceptors are concentrated in areas more prone to injury such as the fingers and toes
 - B. Nociceptors do not send electrical impulses to the spinal cord
 - C. Some nociceptors sense sharp blows, others sense heat
 - D. Nociceptors can detect inflammation caused by injury disease or infection
20. Sharp, shooting pain may indicate which of the following types of injuries?
- A. An injury to a muscle
 - B. An injury to a nerve or nerve root
 - C. An injury to a bone
 - D. A fracture
21. Scientifically, what does massage do to aid in pain management?
- A. Massage reduces mechanical pressure on peripheral somatic nerves by increasing pliability in the tissues that modulate pain sensations
 - B. Massage can inhibit proprioceptors, decreasing pain
 - C. Massage can reduce hydrostatic pressure of edema using lymphatic drainage to decrease pressure on pain receptors
 - D. All of the above

22. What is the goal of using massage strokes that deliberately target fluid movement?
- A. To support circulation
 - B. To increase tissue density
 - C. To reduce local nerve stimulation
 - D. To influence serotonin production

Chapter 5: Justifying massage as treatment

23. According to research indications, although massage was not found to be the definitive treatment for headache and neck pain on its own, it was found to be safe and supportive of many other interventions.
- A. True
 - B. False
24. Primary challenges facing research on the underlying biology of manual therapies include all of the following EXCEPT:
- A. Lack of appropriate animal models
 - B. Lack of cross-disciplinary collaborations
 - C. Adequate research tradition and infrastructure at schools
 - D. Inadequate use of state-of-the-art scientific technologies
25. Evidence from existing studies concludes that when compared to other treatment modalities, massage is at least as helpful in treating typical muscle pain as which of the following?
- A. Acupuncture
 - B. Manipulation
 - C. Ultrasound
 - D. All of the above

Chapter 6: Assessment strategies and selected interventions

26. Why do massage therapists need to perform an assessment, even if a diagnosis has been given to the client's condition?
- A. In order to determine the dysfunctional aspects that best respond to massage
 - B. In order to determine how the massage will be delivered to best support other treatments
 - C. In order to determine if the therapist needs to refer the client for necessary medical treatment
 - D. All of the above
27. All of the following are pain assessment scales EXCEPT:
- A. Verbal rating scale
 - B. Actual rating scale
 - C. Numerical rating scale
 - D. Visual analog scale

28. What happens to the muscles in the upper crossed syndrome pattern (figure 6.6 of the textbook)?
- A. The deep neck flexors and the lower fixators of the shoulder are weakened while their antagonists the upper trapezius, levator scapulae and the pectorals have shortened and tightened
 - B. The abdominal and gluteal muscles have weakened while the psoas and the erector spinae muscles have shortened and tightened
 - C. The neck extensors and the upper trapezius muscles have weakened while the rhomboids and the serratus anterior have tightened and shortened
 - D. The quadratus lumborum muscle has weakened while the upper back muscles have tightened and shortened
29. When palpating, the massage therapist should be able to:
- A. Detect abnormal tissue texture
 - B. Evaluate symmetry in the position of structures, both physically and visually
 - C. Detect and evaluate change
 - D. All of the above
30. When is it appropriate to use the “working level” of palpation?
- A. When working with the skin
 - B. When testing for pain responses
 - C. When palpating for trigger points
 - D. When treating trigger points
31. Which of the following is a skin assessment and palpation method used to palpate for changes in the skin, areas of dysfunction, inflamed tissues, increased hypertonicity, spasm and/or trigger point changes?
- A. Postural muscle sequence
 - B. Skin on fascia displacement
 - C. Positional release
 - D. McGill pain questionnaire
32. What does the acronym STAR stand for in the evaluation and characteristics of somatic dysfunction, such as trigger points?
- A. Sensitivity, tissue Texture change, Asymmetry and Range of motion reduced
 - B. Sensation, Trigger points, Asymmetry and Restriction present
 - C. Sensitivity, tissue Texture change, Acidic tissue and Restriction of tissue
 - D. Sensation, Trigger point changes, Asymmetry and normal Range of motion
33. What does the Nijmegen Questionnaire assess?
- A. Restricted chest tissue and may indicate trigger points in the chest
 - B. Neck pain and may indicate chronic neck dysfunction
 - C. Breathing function and may indicate acute and chronic hyperventilation
 - D. TMJ disorder and may indicate breathing disorders as well

Chapter 7: Modalities working with massage

34. In treating headaches and neck pain, which of the following type of connective tissue is of primary concern?
- A. The fascia that lines all of the organs in the abdominal compartment
 - B. The fascia that wraps the muscle fibers into bundles and compartments and then wraps all these together to form the whole muscle
 - C. Tendons
 - D. Ligaments
35. What types of massage techniques are effective in manipulating connective tissue?
- A. Slow, sustained pressure and agitation techniques
 - B. Kneading techniques
 - C. Skin rolling techniques
 - D. All of the above can be effective in treating connective tissue
36. All of the following statements describe components of the neuromuscular technique (NMT) EXCEPT:
- A. The neuromuscular technique focuses on stretching and releasing connective tissue fascia without using lubricant
 - B. The American version of the neuromuscular technique is an effective method to address trigger point activity
 - C. The neuromuscular thumb and finger techniques are performed with a light lubricant to assess the tissues for local dysfunction
 - D. Each stroke in neuromuscular technique extends for about 4-5 centimeters before the fingers need to be repositioned
37. Which of the following is a pain characteristic of a latent trigger point?
- A. When pressure is applied, a latent trigger point is painful and refers/radiates pain into another area
 - B. The client is not usually aware of a latent trigger point until pressure is applied
 - C. Referred pain experienced from a latent trigger point is usually familiar to the client
 - D. All of the above are characteristics of a latent trigger point
38. What is the aim of muscle energy technique (MET)?
- A. To assess and find trigger points in the attachment points of muscles in order to relieve active trigger point pain
 - B. To contract the shortened muscles, or their antagonists, in order to achieve the release of tone and to then be able with greater ease to stretch the muscle
 - C. To locate fascia restriction in the muscle bellies and then be able to break up the adhesions by stretching the skin over the muscles
 - D. To locate areas of somatic dysfunction and then treat those areas with light compression to achieve a release of tension
39. When is it beneficial to choose reciprocal inhibition (RI) over post-isometric relaxation (PIR)?
- A. When you are working on a client whose shortened muscles are very sensitive
 - B. When you are working with a client who is pain free with no restriction
 - C. When you are working on a client with many active trigger points
 - D. When you are assessing a client instead of treating the client

40. Which of the following is a common error made by the therapist when performing muscle energy technique (MET)?
- A. Inadequate counterforce to the contraction
 - B. Moving to a new position to hastily after the contraction
 - C. Inadequate patient instruction
 - D. All of the above
41. Which of the following is a positional release technique (PRT) suitable for massage therapists to use?
- A. Neuromuscular inhibition
 - B. Pulsed muscle energy technique (pulsed MET)
 - C. Strain/counterstrain (SCS)
 - D. Trigger point therapy
42. All of the following are key features of positional release technique (PRT) EXCEPT:
- A. All movements should be passive
 - B. Movement is in the direction of restriction barriers
 - C. Muscle origins and insertions are brought together
 - D. Tissues being palpated relax
43. What are integrated neuromuscular inhibition and spray and stretch chilling methods used for?
- A. To deactivate trigger points
 - B. To release fascia restriction
 - C. To increase range of motion
 - D. To assess tissues for dysfunction
44. When treating headaches and neck pain, a team approach to rehabilitation is called for, where referral and cooperation between healthcare professionals allow the best outcome to be achieved.
- A. True
 - B. False

Chapter 8: Therapeutic massage treatment for headache and neck pain

45. What is outcome-based massage?
- A. When massage is used to promote general relaxation
 - B. When massage is used for therapeutic reasons with no specific symptoms
 - C. When massage is used to address a specific problem or set of symptoms
 - D. All of the above
46. All of the following can describe “qualities of touch” of massage application EXCEPT:
- A. Drag
 - B. Direction
 - C. Frequency
 - D. Prone

47. Which of the following is an example of a tension loading force in massage therapy?
- A. Gliding
 - B. Stretching
 - C. Skin rolling
 - D. Both A and B
48. Compression loading is the main treatment method of which of the following modalities?
- A. Lymphatic massage
 - B. Trigger point therapy
 - C. Swedish massage
 - D. Thai yoga massage
49. Which of the following is an example of shear loading force in massage therapy?
- A. Gliding
 - B. Compression
 - C. Friction
 - D. Kneading
50. Which of the following is a caution when applying “shear forces” to the tissues?
- A. Shearing forces should not be used during an acute illness or injury, or close to a new scar
 - B. Excess shearing force may result in an inflammatory irritation that causes many soft tissue problems
 - C. Shear force will increase blood flow to an area but will also cause edema from the resulting inflammation and tissue damage from the fractioning
 - D. All of the above are cautions in applying shear forces to tissues
51. All of the following statements are true regarding joint movement EXCEPT:
- A. Joint movement is used for treatment as well as assessment
 - B. Joint movement encourages edema formation in the injured tissues
 - C. Joint movement encourages fluid movement in the different circulation systems
 - D. Joint movement warms the associated tendons, ligaments and joint capsule
52. Massage targeting breathing dysfunction can positively influence breathing in which of the following ways?
- A. By supporting balance between sympathetic and parasympathetic nervous system functions and normalizing and maintaining effective thoracic and respiratory muscle function
 - B. By creating an imbalance between the respiratory and neck musculature and normalizing the function of the sympathetic and parasympathetic nervous systems
 - C. By increasing respiratory function and creating ischemic tissue in the intercostal musculature
 - D. By releasing tension in the cervical vertebrae and supporting balance between sympathetic and parasympathetic nervous system functions

53. Which of the following are key muscles in the upper body that typically become dysfunctional in head and neck problems?
- A. Scalenes, occipital base and sternocleidomastiod
 - B. Multifidi, rotators, intertransversari and interspinalis
 - C. Diaphragm, rhomboid, pectoralis major and anterior serratus
 - D. All of the above
54. Which of the following categories of techniques will best treat a vascular/fluid pressure headache?
- A. Stretching techniques
 - B. Rhythmic compression techniques
 - C. Nerve strokes
 - D. Muscle energy techniques
55. Why does the author recommend using massage application for breathing dysfunction when treating subacute and post-subacute neck pain?
- A. Because breathing dysfunction is commonly associated with headache and neck problems
 - B. Because you can diagnose breathing dysfunction and not subacute neck pain
 - C. Because if you treat your client for breathing dysfunction you distract them from the source of the pain
 - D. All of the above
56. Why is it important to massage both the head and the lumbar areas of a client who has complaints of headaches or neck pain?
- A. Because the connective tissue of the head connects into the lumbodorsal fascia
 - B. It is not important to address the lumbar area of a client with headaches or neck pain
 - C. Because any edema and pain in the head will eventually migrate into the lumbar region
 - D. In order to correctly diagnose your client's condition
57. Massage begins in the deeper tissue layers and progresses to the superficial tissues.
- A. True
 - B. False
58. All of the following are common problematic muscles in the posterior torso EXCEPT:
- A. Levator scapulae
 - B. Latissimus dorsi
 - C. Pectoralis major
 - D. Quadratus lumborum
59. Which of the following client positions is used when treating the low back and hip?
- A. Supine
 - B. Prone
 - C. Side-lying
 - D. Both B and C

60. Ideally, for massage to be effective in treating and preventing dysfunction, how often should a person receive a massage?
- A. Once every 2 months
 - B. When they begin to feel pain
 - C. Once weekly
 - D. Twice a year

Chapter 9: Adjunctive treatment for headache and neck pain: what else should you know, and what else might help

61. According to Selye (1943), what is “general adaptation syndrome”?
- A. A process in which a society responds to multiple variable or constant adaptive demands resulting in an initial stage, an adaptation stage and a stage of exhaustion
 - B. A process in which an individual responds to multiple variable or constant adaptive demands resulting in an initial alarm stage, an adaptation stage and a stage of exhaustion
 - C. A process in which an individual responds to physical outside stimuli, such as being out in the extreme cold weather for extended periods of time
 - D. A process in which an individual responds to multiple variable or constant adaptive demands resulting in an initial alarm stage, a rejection stage and a stage of depression
62. Which of the following can be employed by massage therapists in order to reduce the effects of adaptation influences or help client’s better cope with them?
- A. Aromatherapy
 - B. Relaxation methods
 - C. Soft tissue manipulation modalities
 - D. All of the above
63. In the sensitization model, what creates central sensitization (facilitation) of the supraspinal structures?
- A. Sudden sensory overload from a blood vessel rupture in the brain
 - B. Prolonged bombardment of pain messages from pain receptors in distant myofascial tissues
 - C. Sudden, abrupt onset of pain from an acute injury
 - D. Prolonged pain messages from a breathing pattern disorder in the thoracic spine
64. Which of the following is an example the biomechanical model of care?
- A. Using a broader therapeutic approach to care, such as integrating massage with pharmacologic and nutritional treatment methods
 - B. Incorporating massage with other appropriate soft tissue modalities such as rehabilitation and breathing
 - C. Referring your client for further evaluation before ever treating the headache or neck pain
 - D. Diagnosing the cause of pain on the first visit, then treating the original cause of pain
65. Emotional/stress management and relaxation methods target the underlying cause of emotional distress as well as offer complete relief from their effects.
- A. True
 - B. False

66. Which of the following is a goal for therapists when addressing postural dysfunction?
- A. To normalize imbalances
 - B. To release and stretch whatever is over-short and tight
 - C. To tone the muscles that have become inhibited and weakened
 - D. All of the above are goals when treating postural dysfunction
67. Pursed lip breathing is an example of which of the following?
- A. A seated breathing assessment technique
 - B. A supine breathing assessment technique
 - C. A retraining breathing exercise
 - D. Normal everyday breathing
68. All of the following are examples of self care (that you can instruct your clients to perform) EXCEPT:
- A. Left knee arthroscopy
 - B. Single-leg-stance balance test
 - C. Hot mustard foot bath
 - D. Tension headache home-hydrotherapy method
69. Some of the adjunctive methods described in the chapter 9, such as acupuncture and manipulation, are outside a massage therapist's scope of practice. While they are valuable therapies, they should not be performed by massage therapists without advanced training/certification.
- A. True
 - B. False

This completes the Massage for Headaches and Neck Pain home study course.