

# Flex Therapist CEUs

## Autonomic Nervous System and Related Disorders - Utilizing Integrative Manual Therapy

**1. Lawrence Jones, D.O., the original developer of Strain and Counterstrain Technique detected tender points at the exact same locations in all persons with identical postural deviations. He determined that these postural deviations were because of?**

- A. Joint instability
  - B. Ligament weakness
  - C. Protective muscle spasm
  - D. None of the above
- 

**2. Sharon Weiselfish-Giammatteo, Ph.D., P.T., developed a mechanical model for treatment of patients with atypical pain perception. These patients include which of the following?**

- A. Neurologic
  - B. Pediatric
  - C. Geriatric
  - D. Chronic pain
  - E. All of the above
- 

**3. In order to augment the effects of Advanced Strain and Counterstrain, contact can be maintained on a Synchronizers. A Synchronizer is an energetic reflexogenic point which controls and/or inhibits different body functions.**

- A. True
  - B. False
- 

**4. The components of the Myotatic Reflex Arc include all of the following, EXCEPT?**

- A. muscle fiber
  - B. muscle spindle
  - C. fascial sheath
  - D. gamma and afferent neurons
- 

**5. The muscle spindle, which is the proprioceptor within the muscle fibers are sensitive to which of the following?**

- A. Joint position and motion, tendon tension, and muscle length
- B. Connective tissue inextensibility, muscle temperature, facial tension

- C. Facial tension, fiber innervation, blood pressure
  - D. All of the above
- 

**6. During low gamma activity, the spindle may elicit contraction when the muscle is already shorter than its resting length. If the decreased gamma activity is sustained the muscle contraction is maintained causing a muscle spasm.**

- A. True
  - B. False
- 

**7. The results of Manual Therapy for treatment of neuromusculoskeletal dysfunction include?**

- A. Increased resting muscle length
  - B. Increased joint mobility
  - C. Increased range of motion
  - D. All of the above
- 

**8. The characteristics of exaggerated stretch reflexes, tendon reflexes with an increased threshold to tapping, and increased response of tonic stretch reflexes describe which of the following?**

- A. Tonicity
  - B. Spasticity
  - C. Flexibility
  - D. All of the above
- 

**9. Manual Therapy will typically result in: reducing the hyperactivity and gamma gain; decreasing the primitive patterns of movement; and strengthening voluntary controls.**

- A. True
  - B. False
- 

**10. A contracted and shortened muscle due to alpha gain best defines which of the following?**

- A. Dysautonomia
  - B. Defacilitation
  - C. Hyperinnervated sarcomere
  - D. All of the above
- 

**11. Which of the following techniques is the decrease of afferent and efferent discharge and is associated with the phenomenon of "tissue unwinding"?**

- A. Tender Point Pressure
- B. De-Facilitated Fascial Release
- C. Myofascial Stretching

D. None of the above

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**12. Do not "use" the Tender Point. Pressure on these Tender Points will further stimulate the autonomic reflex arcs and will contribute to problems associated with existing hypertonicity.**

- A. True
  - B. False
- 

**13. Treatment to release the heart muscle includes which of the following?**

- A. Patient in supine
  - B. Neck flexion to the end of cervical range of motion
  - C. Neck side bending to the right 10 degrees
  - D. Left shoulder in horizontal adduction to the end range of motion
  - E. All of the above
- 

**14. Integrative manual therapy of which organ is extremely effective for increasing drainage at the thoracic inlet?**

- A. Lung
  - B. Liver
  - C. Eye
  - D. Stomach
- 

**15. Which of the following best describes the tender point for the stomach?**

- A. 1 inch inferior to umbilicus
  - B. Between the 5th and 6th rib on the left, 2 inches to the left of midline
  - C. Tip of the xiphoid. 1/2 inch to 3/4 inch superior, slightly to the left
  - D. None of the above
- 

**16. All of the following techniques that may alleviate PMS symptoms, such as menstrual cramps, EXCEPT?**

- A. Cervix
  - B. Uterus
  - C. Ureter
  - D. Vagina
- 

**17. Treatment of which of the following can result in a defacilitation of the brain stem tissue and the sub-occipital tissue, leaving a remarkable improvement in upper cervical movement and decrease headaches and occipital tension?**

- A. Tympanic membrane

- B. Myelohyoid
  - C. Ocular muscles
  - D. Thyroid cartilage
- 

**18. Treatment for auditory function include all of the following, EXCEPT?**

- A. Therapist's hands over both ears
  - B. Press both hands in a medial direction, squeezing with 5 grams of force
  - C. Head and neck are rotated 30 degrees towards the ipsilateral side
  - D. Press directly on the Tender Point with an additional 10 grams of force
- 

**19. Which body system or organ does the following tender point correspond with? Bilateral, under the 10th rib, about 5 inches lateral from sternum:**

- A. Thoracic Inlet
  - B. Respiratory Abdominal Diaphragm
  - C. Pelvic Diaphragm
  - D. Cranial Diaphragm
- 

**20. Release of cranial diaphragm hypertonicity can result in which of the following?**

- A. Change of vision
  - B. Improvement of ear pain
  - C. Reduction of tinnitus symptoms
  - D. Improvement in hearing
  - E. All of the above
- 

**21. The Advanced Stain and Counterstrain technique for the circulatory vessel of the lower extremities eliminates severe hypertonicity of arteries, veins, and lymph.**

- A. True
  - B. False
- 

**22. The tender point for the circulatory vessels of the neck is on the lateral neck, on the soft tissue at C2, just anterior to mid-axillary line.**

- A. True
  - B. False
- 

**23. All of the following are true regarding the lower extremities lymphatic vessels' tender point, EXCEPT?**

- A. At the groin
- B. On the inferior pubic ramus

- C. On the tendon of the adductor magnus
  - D. An inch medial from the adductor magnus tendon insertion
- 

**24. Which of the following techniques would be beneficial following a seat belt injury in a motor vehicle accident, so that intra-thoracic bleeding and swelling may be addressed for enhanced lymphatic drainage?**

- A. Chest Cavity Lymphatic Vessels
  - B. Upper Extremities Lymphatic Vessels
  - C. Abdomen Lymphatic Vessels
  - D. Neck Lymphatic Vessels
- 

**25. The value of the Neck Lymphatic Vessels technique cannot be over-emphasized, because approximately one third of all lymph nodes are in the neck region, especially the lateral neck.**

- A. True
  - B. False
- 

**26. Treatment for the Facial Lymphatic Vessels includes which of the following?**

- A. Patient in prone position
  - B. Neck extension 20 degrees (head off bed)
  - C. Chin tuck with over pressure on maxilla
  - D. All of the above
- 

**27. The Advanced Strain and Counterstrain for iliac arteries can benefit which of the following?**

- A. Wound healing of the feet in diabetics
  - B. Decrease the pain of claudications with peripheral neuropathy
  - C. Fascial dysfunction
  - D. Scar tissue
  - E. All of the above
- 

**28. Treatment of the arteries of the arm is good for the patient with arterial blood flow problems. Arterial blood flow problems often present with all of the following, EXCEPT?**

- A. Decreased radial pulse
  - B. Decreased perspiration
  - C. Blue and mottled color of the skin
  - D. Scarring
- 

**29. Hypertonicity of the latissimus dorsi may sublux the humeral head inferiorly causing compression of which of the following arteries?**

- A. Axillary
  - B. Ulnar
  - C. Radial
  - D. Brachial
- 

**30. Treatment for the arteries of the brain includes coronal suture "separation": Frontal border of suture moves anterior and parietal border of the suture moves posterior.**

- A. True
  - B. False
- 

**31. The tender point for the arteries of the eyes is at the medial rim, just medial to the orbit, on the superior rim of the orbit.**

- A. True
  - B. False
- 

**32. The larger tender point, over the temple, encompassing the superior and anterior suture of the sphenotemporal and sphenofrontal suture is the tender point for which of the following arteries?**

- A. Circle of Willis arteries
  - B. Arteries of the eyes
  - C. Artery of the Hypothalamus
  - D. None of the above
- 

**33. Prior to performing most techniques to improve artery supply to the cranial and cervical region, cardiopulmonary system, urogenital tissues and arteries to the spine, it is highly recommended that the practitioner perform all the techniques for the diaphragms (pelvic, respiratory, thoracic inlet, and cranial diaphragms) bilaterally.**

- A. True
  - B. False
- 

**34. Treatment for the common carotid artery includes all of the following, EXCEPT?**

- A. Patient is supine
  - B. Neck flexion to 30 degrees and rotation to 20 degrees to ipsilateral side
  - C. Neck side bending to 30 degrees
  - D. Compression through the head. Hand is on the parietal, ipsilateral side. Inferior compression through C5 transverse process with 5 grams force
  - E. Push C4 in a lateral glide towards the contralateral side
-

**35. Treatment of which of the following arteries is specific for cognitive problems, learning disabilities, and other frontal lobe disturbances:**

- A. External Carotid Artery
  - B. Anterior Cerebral Artery
  - C. Basilar Artery
  - D. Common Carotid Artery
- 

**36. Which location best describes the tender point for the middle meningeal artery?**

- A. Suboccipital space, one-and-a-half inches medial to the tip of the mastoid process. Compress superior for tender point
  - B. On temporal, one inch anterior from the occipitomastoid suture and 2 inches superior from the meatus
  - C. Lateral aspect of C3 transverse process, 1 inch anterior
  - D. None of the above
- 

**37. When the muscles of the aorta are in a state of hypertonicity, the left shoulder girdle will be in a reflexive state of protraction so that horizontal abduction and extension and external rotation is inhibited.**

- A. True
  - B. False
- 

**38. Treatment of the arteries of the lung may result in which of the following?**

- A. Exceptionally good results with asthma and bronchial spasm
  - B. Increase in rib expansion
  - C. Improvement in necrosis of the lungs
  - D. Improved healing when used following cardiac and pulmonary surgery
  - E. All of the above
- 

**39. Following techniques for the coronary arteries, there will be less protective adaptation of the body protecting the coronary arteries, so posture will improve, with less forward head and neck posture. Often there will be remarkable changes in the dowager's hump.**

- A. True
  - B. False
- 

**40. Whenever there is compression of the brachial plexus within the costoclavicular joint space, there is likely to be compromise to the arterial flow of which of the following arteries?**

- A. Axillary
- B. Middle Meningeal

- C. Subclavian
  - D. All of the above
- 

**41. The tender point corresponding to the arteries of the capsule of kidney is the posterior sternal notch, slightly medial to the sternoclavicular joint.**

- A. True
  - B. False
- 

**42. Approximately what percentage of spinal cord fibrosis will disappear immediately after utilization of the anterior and posterior spinal arteries technique?**

- A. 5%
  - B. 15%
  - C. 25%
  - D. 40%
- 

**43. Techniques addressing which of the following may eliminate or decrease scalp itchiness, dandruff, and may partially contribute to increased hair growth?**

- A. Superficial veins of the head
  - B. Superficial veins of the neck
  - C. Superficial cerebral veins
  - D. None of the above
- 

**44. Coughing, sleep apnea, sneezing, hiccupping, burping, choking and other behaviors may decrease after treatment of the alveolar-superior pulmonary vein.**

- A. True
  - B. False
- 

**45. Discs respond to Advanced Strain and Counterstrain with which of the following?**

- A. Increased joint mobility
  - B. Decreased muscle tone surrounding the joint
  - C. Increased ranges of motion
  - D. All of the above
- 

**46. All of the following are steps performed for Tendon Release Therapy, EXCEPT?**

- A. Place the index finger pad of the distal phalanx of the caudal hand over the place of insertion of the inferior end of the tendon
- B. Place the index finger pad of the distal phalanx of the superior hand over the musculotendinous interface of the muscle/tendon, at the superior aspect of the tendon



- C. Push on the tendon tissue with both hands with 1lb fore perpendicular onto the bone
  - D. Then compress the superior aspects and inferior aspects of the tendon together with 1lb force, bringing the proximal and distal ends of the tendon closer together
  - E. Maintain these compressive forces for 2 minutes for the Advanced Strain and Counterstrain
- 

**47. Which of the following is a variation of muscle rhythm affected by dysfunction?**

- A. When there is severe hypertonicity of the muscle, affected by hyperactivity on the myotatic reflex arcs, the rhythm will be decreased frequency
  - B. When there is no innervation of the muscle, as in paralysis secondary to peripheral neuron denervation, there will be no muscle rhythm
  - C. When there is spinal cord injury, with abnormal peripheral nerve innervation, the muscle rhythm is increased frequency
  - D. All of the above
- 

**48. Anterior Compartment Syndrome is a double crush phenomenon; which describes the distal compression causing compromise of the proximal neural mobility.**

- A. True
  - B. False
- 

**49. The authors propose that Headaches and Migraines always have a component of sacral dysfunction.**

- A. True
  - B. False
- 

**50. The developers of Advanced Strain/Counterstrain are convinced that correction of which of the following biomechanics should be treated prior to other intervention for spinal syndromes?**

- A. Pelvic joints
  - B. Sacral joints
  - C. Sacrococcygeal joint
  - D. All of the above
- 

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