

International DOH-Physio

**Department of Health- Physiotherapist Licensing
Examination**



For More Information – Visit link below:

<https://www.examsboost.com/>

Product Version

- ✓ Up to Date products, reliable and verified.
- ✓ Questions and Answers in PDF Format.

Latest Version: 6.0

Question: 1

A patient has neck pain and is receiving physiotherapy. The physical therapist is employing massage and stretching techniques. Which muscle group can the physical therapist stretch on the patient in picture?



- A. Sternocleidomastoid (SCM).
- B. Deltoids.
- C. Triceps.
- D. Biceps.

Answer: A

Explanation:

The Sternocleidomastoid (SCM) muscle is a key muscle located in the neck, which plays a crucial role in facilitating various movements including rotation and flexion of the head. It is anatomically positioned on each side of the neck, originating from the sternum and clavicle, and inserting on the mastoid process of the temporal bone of the skull.

In the context of physiotherapy for neck pain, targeting the SCM muscle is particularly relevant. Neck pain can often be attributed to tension or tightness in the SCM muscles, which can result from poor posture, overuse, or injury. The physical therapist's use of massage and stretching techniques is aimed at relieving this tension, promoting relaxation of the muscle, and enhancing mobility.

Massage therapy helps in increasing blood circulation to the muscle, which can aid in the recovery of muscle strain and facilitate the healing process. Furthermore, stretching the SCM can help in lengthening the muscle fibers, thus improving flexibility and reducing stiffness. This can lead to a significant decrease in neck pain and an increase in range of motion.

The therapist may employ various stretching exercises specifically designed for the SCM muscle. These stretches might involve gentle tilting and rotation of the head and neck, which allows the SCM muscle to

stretch properly. Such maneuvers are critical in ensuring the muscle retains its flexibility and function, thereby aiding in the overall recovery and comfort of the patient.

In conclusion, focusing on the SCM muscle during physiotherapy is essential for patients suffering from neck pain. By employing targeted massage and stretching techniques, the therapist can effectively alleviate pain, reduce muscle tension, and improve neck mobility, contributing significantly to the patient's recovery and quality of life.

Question: 2

A stroke patient who has fluent aphasia also has trouble expressing emotions in her speech. Which area of the brain was most likely damaged by the stroke?

- A. Wernicke's area.
- B. Primary auditory area.
- C. Auditory association area.
- D. Common integrative area.

Answer: A

Explanation:

Wernicke's area is located in the temporal lobe of the brain, specifically on the left side for most individuals. This region is crucial for language comprehension and the processing of speech. When Wernicke's area is damaged, a person can develop fluent aphasia, also known as Wernicke's aphasia. This condition is characterized by the production of fluent, grammatical speech, but it tends to lack meaning and is often filled with nonsensical phrases and jargon. Additionally, individuals with Wernicke's aphasia typically have great difficulty in understanding spoken language.

The ability to express emotions through speech, also known as affective prosody, involves several areas of the brain, including both Wernicke's area and Broca's area. Broca's area, located in the frontal lobe, is primarily associated with the production of speech and language control. It works closely with Wernicke's area to produce coherent speech that includes appropriate emotional content.

Thus, when a stroke patient exhibits fluent aphasia with impaired emotional expression in speech, it suggests damage not only to the language comprehension functions of Wernicke's area but also potentially affects the networks between Wernicke's and Broca's areas that manage the emotional aspects of language. This interconnection is crucial for the modulation and expression of emotions in speech, enabling individuals to communicate feelings effectively alongside information.

In summary, the damage to Wernicke's area in the brain is the most likely cause of the symptoms described in the question—fluent aphasia with a difficulty in expressing emotions in speech. This area's role in understanding and processing language, as well as its involvement in the emotional modulation of speech, is essential for normal communication.

Question: 3

All of the following are physiological effects of general cold application EXCEPT:

- A. Metabolic rate is decreased.
- B. Respiratory rate is decreased.

- C. Cardiac output is decreased.
- D. Venous blood pressure is decreased.

Answer: C

Explanation:

The question requires identifying which statement among the given options does not correctly describe the physiological effects of general cold application on the body. To address this, it is essential to understand how cold therapy typically affects various bodily functions.

Firstly, the application of cold generally causes vasoconstriction, the narrowing of blood vessels, which is the body's way of reducing heat loss from the skin surface. This vasoconstriction mainly occurs in the peripheral areas of the body but can lead to increased blood flow to the internal organs to maintain core temperature. As a result, the cardiac output, which is the amount of blood the heart pumps in a minute, actually increases rather than decreases. This is contrary to what one of the statements suggests, making it incorrect.

Additionally, cold application is known to decrease the metabolic rate. This is because the body slows down its metabolic processes in response to reduced environmental temperatures to conserve energy. Therefore, the statement that metabolic rate is decreased is correct and aligns with the physiological effects of cold exposure.

The respiratory rate typically decreases as well in response to cold. The body conserves energy by reducing the frequency of breaths. This physiological change helps in maintaining stable gas exchanges under reduced metabolic conditions, supporting the statement that the respiratory rate decreases with general cold application.

Concerning blood pressure, the general effect of cold application is to increase arterial blood pressure due to vasoconstriction and an increased cardiac output. However, venous blood pressure may decrease because cold-induced vasoconstriction can reduce the volume of blood returning to the heart, confirming that the statement about decreased venous blood pressure is accurate.

To summarize, the statement that "Cardiac output is decreased" is incorrect as a physiological effect of general cold application. In fact, cardiac output generally increases due to the body's compensatory mechanisms to maintain core temperature and ensure adequate circulation to vital organs. This makes it the exception among the listed effects and answers the question posed.

Question: 4

Proprioceptive Neuromuscular Facilitation (PNF) uses a technique involving bilateral upper extremity asymmetrical patterns performed as a closed-chain activity. This is known as which of the following?

- A. overflow
- B. chopping
- C. developmental sequence
- D. mass movement

Answer: B

Explanation:

Proprioceptive Neuromuscular Facilitation (PNF) is a therapeutic technique used in physical therapy that aims to enhance both the response of the neuromuscular system and the recovery process through stimulation. This technique is grounded in the concept that the human body functions in patterns rather than in isolated movements. PNF utilizes these patterns to improve muscular strength and coordination, which are crucial for daily activities.

The term "chopping" refers to a specific PNF technique. Chopping involves using a pattern that combines both arms performing an asymmetrical movement where one hand follows the other in a diagonal pattern across the body. This movement pattern is usually performed as a closed-chain activity, meaning the hands or feet are in a fixed position during the exercise, typically involving resistance. For instance, a person might be standing, pressing down against a handle attached to resistance bands, or pushing against a fixed object.

Closed-chain exercises in PNF are beneficial because they mimic functional movements and tasks, promoting stability and strength through multiple joint and muscle groups simultaneously. This type of exercise is particularly useful for rehabilitation settings, where improving functional capacity and coordination is often the goal.

Thus, in PNF, the use of bilateral upper extremity asymmetrical patterns performed as a closed-chain activity, such as chopping, is designed to engage the neuromuscular system in a way that helps to reinforce the weaker muscles and improve overall motor control and balance. This approach is based on the premise that engaging stronger parts of the body can help to stimulate and improve the function of weaker parts, which is crucial for achieving balanced muscle function and normal movement patterns.

Question: 5

There are several types of sensation that a physical therapist will evaluate including:

- A. superficial
- B. deep
- C. cortical
- D. all of the above

Answer: D

Explanation:

****Question**** There are several types of sensation that a physical therapist will evaluate including: - superficial - deep - cortical - all of the above

When assessing a patient, a physical therapist (PT) is trained to evaluate various types of sensations. This evaluation is critical as it helps in determining the level of sensory function or impairment, which can significantly impact a patient's ability to perform daily activities safely and effectively.

The first type of sensation that a PT evaluates is ****superficial sensation****. This involves the assessment of sensations such as touch, temperature, pain, and pressure that are perceived through receptors in the skin. Testing superficial sensation helps determine if the sensory nerves that travel from the skin to the brain are functioning properly.

Next, the PT evaluates ****deep sensation****, also known as proprioceptive sensation. This type of sensation is related to the awareness of the position and movement of parts of the body, sensed through receptors in muscles, tendons, and joints. It is crucial for coordinating movements and maintaining balance. Assessing deep sensation involves checking functions such as proprioception (sense of joint position) and kinesthesia (sense of joint movement).

The third type of sensation evaluated is **cortical sensation**, which involves complex sensory perceptions such as stereognosis (ability to recognize objects by touch), graphesthesia (ability to recognize writing on the skin purely by the sensation of touch), and two-point discrimination (ability to distinguish two closely spaced points touching the skin). These sensations are processed in the cerebral cortex of the brain and are essential for performing tasks that require fine motor skills and cognitive integration of sensory input.

Finally, when the option "all of the above" is presented, it indicates that the PT will assess all three types of sensations—superficial, deep, and cortical. It is a comprehensive approach to fully understand a patient's sensory function in multiple dimensions, which can help tailor a specific and effective rehabilitation program.

In conclusion, a thorough sensory evaluation by a physical therapist includes tests for superficial, deep, and cortical sensations. By examining all these aspects, a PT can gain a holistic view of a patient's sensory capabilities, identify areas of impairment, and design an intervention that enhances the patient's safety, functionality, and quality of life.

Question: 6

Huntington's Disease (HD), also known as Huntington's chorea, is a neurological disorder of the CNS and is characterized by degeneration and atrophy of the basal ganglia and cerebral cortex within the brain. The neurotransmitters become deficient and are unable to modulate movement. Physical therapy should maximize all of the following except:

- A. strength
- B. respiration
- C. balance
- D. postural control

Answer: B

Explanation:

Huntington's Disease (HD), also known as Huntington's chorea, is a neurological disorder primarily affecting the central nervous system. It is characterized by the degeneration and atrophy of the basal ganglia and cerebral cortex within the brain. This deterioration leads to deficiencies in neurotransmitters, which are crucial for modulating movement, thus causing the characteristic uncontrolled movements associated with the disease.

Physical therapy plays a crucial role in the management of Huntington's Disease. The primary goals of physical therapy in HD patients are to maximize functional abilities as long as possible and maintain quality of life. Specific areas targeted by physical therapy include endurance, strength, balance, postural control, and functional mobility. Each of these areas addresses different challenges faced by HD patients. Endurance training helps in coping with fatigue; strength training aids in combating muscle weakness; balance exercises help in preventing falls; and improving postural control and functional mobility aids in daily activities, thereby enhancing independence.

Respiration, while important in the context of overall health and well-being, is not typically a primary focus of physical therapy for Huntington's Disease unless there are specific complications that warrant it, such as respiratory muscle weakness or reduced lung capacity. However, general exercises and activities promoted by physical therapy can indirectly benefit respiratory function through improved overall fitness and health.

Therefore, when asked what physical therapy should maximize in the context of Huntington's Disease management, the answer would typically include endurance, strength, balance, postural control, and functional mobility, but not specifically respiration unless clinically indicated by the patient's condition. Medical management of Huntington's Disease, which often includes genetic, psychological, and social counseling, is holistic and complements the physical interventions to address the broader needs of the patient and family.

Question: 7

A 48 year old stroke patient has the type of aphasia where she can hear. However, her understanding of sounds and words is faulty. Which area of the brain was damaged in this patient?

- A. Premotor area.
- B. Broca's speech area.
- C. Auditory association area.
- D. Primary auditory area.

Answer: C

Explanation:

The correct area of the brain that was damaged in the 48-year-old stroke patient, who can hear but has a faulty understanding of sounds and words, is the Auditory Association Area. This region is critical for processing and interpreting the complex aspects of hearing, including the understanding of speech. The Auditory Association Area is located in the temporal lobe of the brain, adjacent to the primary auditory cortex. While the primary auditory cortex is primarily responsible for detecting basic characteristics of sound such as pitch and volume, the Auditory Association Area plays a key role in interpreting the meaning of sounds, which is essential for understanding spoken language. This higher level processing includes the recognition of words, sentences, and the overall context of the conversation.

In the case of the patient described, the symptoms suggest a type of fluent aphasia often referred to as Wernicke's aphasia. This condition arises when there is damage to the posterior regions of the temporal lobe, specifically around the auditory association area. Individuals with Wernicke's aphasia typically produce fluent speech but it often lacks meaning or is filled with nonsensical phrases. They also generally have significant difficulty in understanding spoken language, a condition sometimes termed as 'word deafness'.

Therefore, the damage to the Auditory Association Area disrupts the patient's ability to make sense of words and sentences, even though the ability to hear the sounds remains intact. This highlights the critical role of this brain region in linking sound perception with meaningful communication, which is essential for effective verbal interaction.

Question: 8

A patient receives myofascial release as part of his rehabilitation program. When forming myofascial spread, what is a general precaution?

- A. Hold a position until resistance gives and the hands slide apart.

- B. Lift and roll the skin.
- C. Never force the skin.
- D. Gently stretch the skin.

Answer: B

Explanation:

Myofascial Release Therapy (MRT) is a specialized treatment that focuses on relieving tension and pain by releasing restrictions within the fascial network, which is the connective tissue that surrounds and supports muscles throughout the body. One of the key elements in this therapy involves applying gentle, sustained pressure on the soft tissues while performing stretches that help in releasing the fascial restrictions.

A crucial general precaution in Myofascial Release Therapy is to never force the skin or underlying tissues. Forcing the skin can lead to increased discomfort, potential bruising, and further irritation or damage to the soft tissues and fascia. The goal of MRT is to aid the body's natural healing process by enhancing blood circulation, lymphatic drainage, and relaxation of contracted muscles, without causing additional harm or stress to the patient.

When performing myofascial release, practitioners should use adequate but gentle pressure and must be attentive to the body's response to the therapy. The therapy involves "listening" to the body's response to the touch and pressure, allowing the practitioner to adjust the technique accordingly. This approach helps in achieving effective and safe outcomes.

Therefore, the correct approach in Myofascial Release Therapy is to gently stretch and manipulate the skin and underlying tissues within the comfort threshold of the patient. Never forcing the skin ensures that the therapy is both therapeutic and non-invasive, aligning with the principles of safety and patient-centered care in physical rehabilitation practices.

Question: 9

In terms of determining the reliability of a research instrument, which type uses the measure that items of an instrument correlate well with other items on the instrument?

- A. internal consistency
- B. inter-rater
- C. test-retest
- D. content correlation

Answer: A

Explanation:

Internal consistency is a measure used to evaluate the reliability of a research instrument. It specifically refers to the extent to which all items on a test measure the same characteristic or construct. In simpler terms, internal consistency assesses whether the items on an instrument are consistent with one another in their scores.

To determine internal consistency, researchers often use statistical methods such as Cronbach's alpha, which evaluates how closely related a set of items are as a group. A high Cronbach's alpha value (usually above 0.7) suggests that the items are measuring the same underlying construct and thus, exhibit strong

internal consistency. This is crucial because consistent items typically contribute to the reliability and validity of the instrument, leading to more accurate and generalizable results.

It is important to differentiate internal consistency from other types of reliability such as test-retest reliability, which examines the stability of test scores over time, and inter-rater reliability, which assesses the agreement among different raters or observers. While these types provide valuable insights into the reliability of a research instrument, they do not address the homogeneity of the item set as internal consistency does.

Furthermore, internal consistency does not necessarily imply that the instrument has good content validity (whether the instrument fully represents the construct it aims to measure). Hence, researchers need to ensure that they address and validate each aspect of reliability and validity according to the specific requirements and context of their study.

In summary, internal consistency is a fundamental measure of reliability that indicates how well the items on a research instrument correlate with each other. This type of consistency is essential for confirming that the instrument functions uniformly in measuring the intended construct, thereby supporting the overall credibility and reliability of the research findings.

Question: 10

In terms of the principles of wound care, which of the following is the term for a rupture along a surgical incision?

- A. dehiscence
- B. friction
- C. angiogenesis
- D. maceration

Answer: A

Explanation:

Dehiscence is a term used in the context of surgical wound care to describe the partial or total separation of layers in a surgical incision. This complication can occur when the edges of a wound fail to meet, or when the wound layers rupture, leading to a reopening of the surgical site. Although dehiscence can occur in any surgical wound, it is most commonly associated with abdominal surgeries. The risk factors contributing to dehiscence include poor surgical technique, excessive tension on the wound, infection, or underlying patient conditions such as diabetes, obesity, or compromised immune systems. The use of certain medications, such as corticosteroids or immunosuppressive drugs, may also increase the risk of dehiscence.

Clinically, dehiscence is a serious concern as it can lead to delayed healing, increased risk of infection, or even more severe complications such as evisceration, where internal organs protrude through the open wound. To diagnose dehiscence, healthcare providers generally rely on visual examination of the wound and patient reports of unusual symptoms such as sudden increases in pain, the sensation of tearing, or visible gaps in the incision.

Management of dehiscence involves prompt medical intervention. This may include the surgical re-closure of the wound, enhanced wound care measures, and possibly the administration of antibiotics if an infection is present. Preventative measures are crucial and focus on meticulous surgical technique, proper post-operative care including adequate support for the wound, and close monitoring for any signs of complications.

In contrast, other terms such as friction, angiogenesis, and maceration describe different aspects of wound care. Friction refers to the damage caused by rubbing or scraping, angiogenesis is the formation of new blood vessels during the healing process, and maceration is the softening and breakdown of skin resulting from prolonged exposure to moisture. Each of these factors plays a distinct role in the management and healing of wounds but does not specifically relate to the separation of a surgical incision as seen in dehiscence.

Thank You for Trying Our Product

For More Information – **Visit link below:**

<https://www.examsboost.com/>

15 USD Discount Coupon Code:

G74JA8UF

FEATURES

- ✓ **90 Days Free Updates**
- ✓ **Money Back Pass Guarantee**
- ✓ **Instant Download or Email Attachment**
- ✓ **24/7 Live Chat Support**
- ✓ **PDF file could be used at any Platform**
- ✓ **50,000 Happy Customer**



Visit us at: <https://www.examsboost.com/test/doh-physio>