PTA 7 Modalities and Procedures II

Student Learning Objectives

As evidenced by successful completion of written and practical examinations, lab activities, assignments, research article reviews, and the role playing and analysis of clinical scenarios, the student will:

1.0. Implement electrotherapy treatments (including high/low voltage, interferential and TENS).

1.1. State the historical use of electrical stimulation in rehabilitation.

1.2. Define the therapeutic goals of electrical therapy.

1.3. Define the concepts of electrophysics including: voltage, resistance, impedance and capacitance.

1.4. Identify the difference between direct current and alternating current.

1.5. Identify the differences between low voltage and high voltage current.

1.6. Define electrical current in terms of pulse and wave forms, amplitude, duration, frequency and duty cycle.

1.7. Identify the physiological events associated with electrical stimulation.

1.8. Define the distinguishing characteristic and indications and contraindications of electrical stimulation.

1.9. Describe the uses and benefits of electrical stimulation in the treatment of pathology (loss of ROM, weakness, pain, open wounds).

1.10. Distinguish the physiological effects of various parameters of electrical stimulation (voltage, type, dosage, duty cycle, etc.).

1.11. Discuss the therapeutic relationship of electrotherapy with other therapeutic procedures.

1.12. Demonstrate safe administration of electrical stimulation including low and high volt current, TENS and interferential current, in the management of pain, weakness, open wounds, and other common conditions treated with physical therapy.

2.0. Implement EMG biofeedback treatment.

2.1. Define the distinguishing characteristics and indications and contraindications of EMG biofeedback.

2.2. Describe the uses of EMG biofeedback in physical therapy treatment.

2.3. Discuss the therapeutic relationship of EMG biofeedback with other therapeutic procedures.
2.4 Demonstrate the safe use of EMG biofeedback while considering indications and contraindications.

3.0 Implement iontophoresis treatments.

3.1 Define the distinguishing characteristics and indications and contraindications of iontophoresis.

3.2 Explain the concepts of ion transfer related to iontophoresis.

3.3 Discuss the therapeutic relationship of iontophoresis with other therapeutic procedures.

3.4 Demonstrate safe administration of iontophoresis, while considering patient comfort, dosage, agent, indications and contraindications and physiological effects.

4.0 Implement edema control activities utilizing air compression, external wrapping, and elevation.

4.1 Define the distinguishing characteristics and indications and contraindications of air compression, external wrapping, and elevation activities.

4.2 Define mechanisms of edema control.

4.3 Demonstrate safe and appropriate administration of mechanical compression, external wrapping, and elevation activities.

5.0 Interpret thoracoabdominal movement and breathing patterns

5.1 Observe breathing patterns.

5.2 Identify contraction of accessory muscles.

5.3 Describe coughing techniques and demonstrate breathing exercises.

5.4 Teach coughing and breathing activities.

6.0 Implement pulmonary toilet treatment

6.1 Describe the anatomical organization of the respiratory system.

6.2 Discuss the importance of the recognition of respiratory distress and pulmonary hygiene in the prevention and treatment of disease.

6.3 Describe postural drainage, vibration and percussion techniques, and the characteristics of cough and sputum.

6.4 Describe pathological conditions treated with postural drainage and pulmonary hygiene techniques.
6.5. Demonstrate safe and appropriate performance of auscultation, postural drainage, vibration, percussion, and pulmonary hygiene techniques.

6.6. Teach pulmonary hygiene activities.

6.7. Demonstrate appropriate documentation of pulmonary toileting.

6.8. Analyze the effectiveness of pulmonary hygiene techniques.

6.9. Discuss the therapeutic relationship of pulmonary toileting with other therapeutic procedures (therapeutic exercise, range of motion, functional activities, etc.)

7.0 Implement therapeutic massage treatment.

7.1. Discuss the uses, precautions, and applications of therapeutic massage.

7.2. Describe specific massage techniques including, effleurage, petrissage, tapotement and myofascial release.

7.3. Discuss the therapeutic relationship of massage with other therapeutic procedures (therapeutic exercise, range of motion, functional activities, etc.)

7.4. Demonstrate safe and appropriate performance of therapeutic massage techniques.

7.5. Demonstrate appropriate documentation of therapeutic massage.

7.6. Teach the benefits of therapeutic massage.


8.1. Perform therapeutic techniques demonstrating an understanding of the role of the physical therapist assistant in rehabilitation.

8.2. Perform therapeutic techniques appropriately employing universal precautions and sound body mechanics.

8.3. Perform therapeutic techniques demonstrating an understanding of organizational structure, levels of authority, and fiscal considerations of the health care delivery system.

8.4. Teach the uses, applications and responses of modalities and procedures to patient, family and other healthcare workers with emphasis on safety and rationale as directed by the physical therapist.

8.5 Demonstrate the adjunctive nature of modalities and procedures by integrating their use in complete treatment applications.

8.6 Implement therapeutic interventions within the plan of treatment utilizing knowledge of assessment and measurement, functional activites, modality, and therapeutic exercises skills.

8.7 Implement therapeutic interventions within the plan of
8.8 treatment demonstrating consideration of time management, therapeutic sequence and procedure selection issues.

8.9 Demonstrate appropriate documentation of modality and procedure use, considering patient response, treatment parameters, long/short term goals, and effectiveness.

8.10 Perform physical therapy treatment considering influencing factors (psychosocial, economic, patient satisfaction, legal/ethical, etc.).

8.11 Assist in discharge planning and alternative levels of care decision making with supervising physical therapist.

8.12 Communicate patient response to supervising physical therapist.

8.13 Identify clinical responses and situations that require the attention of the supervising physical therapist or immediate interventions such as first aid or cardiopulmonary resuscitation.

8.14 Analyze the effectiveness of modalities and procedures in specific clinical situations.

8.15 Assess patient response to treatment and appropriately alter therapeutic intervention within the plan of treatment.

8.16 Delineate beneficial and untoward effects of electrotherapy, ultraviolet pulmonary toileting and therapeutic massage.

8.17 Analyze the relationship of all physical modalities with other therapeutic procedures (therapeutic exercise, range of motion, functional activities).

8.18 Verify effectiveness of teaching behavior by analyzing patient performance.

9.0 Demonstrate appropriate professional behavior

9.1 Attend and be on time for class, lab, and scheduled appointments.

9.2 Be prepared for lab activities, attend to tasks assigned.

9.3 Accept constructive criticism and respond and/or follow through appropriately.

9.4 Express self in a clear and easily understood manner.

9.5 Maintain appropriate personal hygiene.

9.6 Treat others with positive regard, dignity and respect.

9.7 Analyze and examine professional literature considering: specific scientific methods, interpretation of results, and clinical significance in order to foster further personal investigation and clinical effectiveness.

9.8 Explain the importance of lifelong learning.

9.9 Describe how professional development can occur.