Objectives and Program Schedule

MedBridge

Exercise Prescription in the Home: Tissue Healing

Wendy K. Anemaet, PT, DPT, PhD, GCS, GTC, COS-C

Course Description

It is well known that exercise can help patients at all phases of their rehabilitation, but what exercises are best for patients in the acute healing phases when edema and pain are present? It is important that exercises prescribed during this time not only help reduce the edema and pain, but also do not cause any further damage. This course discusses the physiology behind acute tissue healing, how clinicians can use a clinical decision making process for therapeutic exercise prescription, and practical examples of assessing and prescribing exercise for tissue healing. With this information, clinicians enhance patient outcomes through appropriate use of exercise.

Objectives

1. Describe how tissue healing fits in framework for clinical decision making in therapeutic exercise prescription
2. Discuss indications and contraindications for tissue healing exercise
3. List ways to assess the need for and progress with tissue healing exercise
4. Detail various types of exercise and appropriate dosage to effect tissue healing
5. Apply tissue healing exercise principles to a variety of patients

Chapter 1: The Physiology of Tissue Healing

This chapter details where exercise for tissue healing fits within the exercise framework. It describes the healing process in various types of tissues and discusses factors that aid in tissue healing in order to provide the background for prescribing exercise to enhance tissue healing.

Objectives

1. *Give an example of when an exercise for tissue healing would be appropriate*
2. *Compare and contrast tissue healing in bone, ligament, tendon, muscle, and skin*
3. *List factors that facilitate tissue healing*

Lecture and Demonstration: 28 minutes, Learning Assessment: 10 minutes

Chapter 2: Assessing the Need for and Progress with Tissue Healing Exercise

This chapter describes the signs and symptoms of inflammation that may indicate the need for tissue healing exercise. Once these signs and symptoms are identified, it is important to assess them using various methods including observation, skin temperature, girth measures , and standardized pain assessments.

Objectives

- *Identify the four cardinal signs of inflammation*
- *Describe at least one assessment technique that could be used to assess each of the following: rubor, skin temperature, girth, and pain*
- *Interpret the results of an assessment of the signs and symptoms of inflammation*

Lecture and Demonstration: 14 minutes, Learning Assessment: 10 minutes

Chapter 3: Exercises for Tissue Healing

This chapter describes exercises that would enhance tissue healing. It includes indications and contraindications, types of exercise, and exercise parameters.

Objectives

- *Cite indications and contraindications for exercises for tissue healing*
- *Prescribe an exercise that will enhance tissue healing*
- *List the pros and cons of passive, active assisted and active range of motion exercise*
- *Describe how aerobic exercise can be used to facilitate tissue healing*

Lecture and Demonstration: 17 minutes, Learning Assessment: 10 minutes

Chapter 4: Case Application of Exercises for Tissue Healing

This chapter describes a case of a patient with edema and pain after a total knee arthroplasty one-day prior. It includes a demonstration of assessment and outcome measurement techniques and exercise prescription for tissue healing.

Objectives

- *Identify the need for tissue healing exercise*
- *Cite at least two assessment or outcome measurement techniques that would be appropriate for use in this case*
- *Prescribe two exercises detailing specific parameters that would enhance tissue healing in this case.*

Lecture and Demonstration: 12 minutes, Learning Assessment: 10 minutes

Total Time: 2 hours