



Online Continuing Education Courses
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AOTA Approved Provider #4023

Course Title: Therapeutic Modalities 204

Course Subtitle: Introduction to Thermal Agents and Hot and Cold

Source: Physical Agents in Rehabilitation from Research to Practice, 5th edition, by Michelle Cameron.

Source Description: With straightforward, in-depth coverage of the use of physical agents to improve patient outcomes, *Physical Agents in Rehabilitation: An Evidence-Based Approach to Practice, 5th Edition* reflects how physical agents and modalities are being discussed in the classroom. This new edition brings the ideal balance of evidence and practical instruction to the learning and practice of physical agents in rehabilitation. Comprehensive coverage of all physical agents includes the mechanisms, clinical effects, and application techniques for thermal agents, ultrasound, electrical currents, electromagnetic radiation, hydrotherapy, traction, and compression. Plus, each chapter includes a scientific rationale and step-by-step instructions in the use of the agent(s), as well as up-to-date research support and new *Find the Evidence* tables.

Target Audience: OT/OTA and other healthcare professionals

Course Length: 4 hours

Educational Level: Introductory, Intermediate, Advanced

The course is written at the intermediate level, but learners of all levels will benefit from the information.

Course Objectives:

At the end of the course, participants will be able to: (objectives are listed based on course section for individual detail)

Introduction to Thermal Agents

- List and describe 5 different modes of heat transfer
- Define and differentiate conduction, convection, conversion, radiation, evaporation
- Provide an example for each mode of heat transfer

Superficial Hot and Cold

- Describe 3 effects of cold and 4 effects of heat
- Indicate 4 clinical uses for heat and 4 uses for cold
- List and describe 2 contraindications for heat and 2 contraindications for cold

- Analyze 4 adverse effects of thermotherapy
- Describe the application techniques of both hot and cold
- Describe important components for documentation for thermal modalities
- Read case studies to highlight clinical application
- Discuss clinical reasoning for choosing between cryotherapy and thermotherapy

Outline of Content:

Hour #1

Specific Heat

Modes of Heat Transfer

Conduction

Convection

Conversion

Radiation

Evaporation

Hour #2

Cryotherapy

Effects of Cold

Hemodynamic Effects

Neuromuscular Effects

Metabolic Effects

Clinical Indications for Cryotherapy

Inflammation Control

Edema Control

Pain Control

Modification of Spasticity

Symptom Management in Multiple Sclerosis

Facilitation

Cryokinetics and Cryostretch

Contraindications and Precautions for Cryotherapy

Contraindications for the Use of Cryotherapy

Precautions for the Use of Cryotherapy

Adverse Effects of Cryotherapy

Application Techniques

Hour #3

General Cryotherapy

Cold Packs or Ice Packs

Ice Massage

Controlled Cold Compression Unit

Vapocoolant Sprays and Brief Icing

Documentation

Examples

Clinical Case Studies

Thermotherapy
Effects of Heat
Hemodynamic Effects
Neuromuscular Effects
Metabolic Effects
Altered Tissue Extensibility
Clinical Indications for Superficial Heat
Pain Control
Increased Range of Motion and Decreased Joint Stiffness
Accelerated Healing
Infrared Radiation for Psoriasis

Hour #4

Contraindications and Precautions for Thermotherapy
Contraindications for the Use of Thermotherapy
Precautions for the Use of Thermotherapy
Adverse Effects of Thermotherapy
Burns
Fainting
Bleeding
Skin and Eye Damage From Infrared Radiation
Application Techniques
General Thermotherapy
Hot Packs
Paraffin
Fluidotherapy
Infrared Lamps
Contrast Bath
Documentation
Examples
Clinical Case Studies
Choosing Between Cryotherapy and Thermotherapy

Instructional Methods and Formats:

Online course available 24/7 at www.OnlineCE.com includes PDF downloadable course.
See course formats for additional details.

Course Completion Requirements:

A minimum passing score of 100% is required for course completion. You will have as many attempts as needed until your passing score of 100% is achieved. Upon successful completion of course, you will receive your certificate of completion and AOTA eligible CEUs.

AOTA Classification Codes:

Category 1: Domain of OT

Category 2: Occupational Therapy Process

Category 3: Professional Issues

Additional Policies:

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