Thera-Paw, Inc. presents:

Practical Approaches to Rehabilitative Medicine: Advanced Techniques in Physical Therapies

(participants choose 3 out of 4 available courses)

Date: April 24, 2010
Location: Hamilton Park Hotel and Conference Center
Florham Park, New Jersey
Target Audience: Intermediate-to-advanced level course for canine rehabilitation professionals with two or more years experience in canine rehabilitation and physical therapy.
Educational Credits: 8:00 am – 6:00 pm; 7.5 total contact hours. Certificates will be awarded.

COURSE DESCRIPTIONS & OUTLINES

(each course 155 minutes)

Advanced Manual Techniques for the Treatment of Sports-Related Injuries

***Instructors**: Ria Acciani, MPT, PT and David Acciani, PT*

Course Description: This portion of the *Practical Approaches to Rehabilitative Medicine: Advanced Techniques in Physical Therapies* course is designed to provide participants with a working knowledge of evaluation skills to assess 2 common sports-related injuries; 1) medial shoulder instability, and 2) iliopsoas strain. The focus will also include the ability to utilize advanced manual techniques to effectively treat clinical objective findings that stem from these soft tissue and sports-related injuries.

Learning Objectives:

- Participants will gain a solid understanding of the functional anatomy of the shoulder and hip
- Participants will be able to conduct a subjective and physical exam of the shoulder and hip needed to determine sports-related injuries, specifically for medial shoulder instability (MSI) and Iliopsoas strain
- Participants will gain an understanding of common areas of muscular restriction and joint hyper-/hypo-mobility that can be associated with MSI and Iliopsoas strain
- Participants will be able to properly execute advanced manual techniques to effectively treat objective findings associated with soft tissue injuries

Course Outline:

Lecture: Evaluation/assessment of the shoulder and hip (40 minutes)

- Quick review of anatomy of shoulder and hip
- Review of joint mechanics and gait abnormalities
- Outline pathology and mechanism of injury of MSI and Iliopsoas strain
- Discuss special tests and goniometric measurements
- Outline possible objective findings and present common subjective complaints
- Describe assessment of soft tissue and common findings associated with MSI and Iliopsoas strain

Lab: Special tests and goniometric measurements for assessment of soft tissue injury of the shoulder and hip (30 minutes)

- Demonstrate special tests for MSI and Iliopsoas strain
- Demonstrate goniometric measurements of shoulder for MSI

Lab: Physical assessment techniques for identifying soft tissue injury in the shoulder and hip (35 minutes)

- Demonstrate soft tissue palpation of hip and shoulder, identify joint hyper-/hypo-mobility
- Palpation techniques to identify MSI
- Palpation techniques to identify iliopsoas strain

Lab: Advanced manual techniques (50 minutes)

- Demonstrate specific manual techniques emphasizing proper hand placement, direction of force, and proper grade applied to achieve desired results

Basic and Advanced Kinesiotaping Techniques

Instructor: *Heather Beaudry-St. Germain, DC, BSc, LVT, CCRP*

Course Description: This portion of the *Practical Approaches to Rehabilitative Medicine: Advanced Techniques in Physical Therapies* course is designed to offer participants resources on the history, application, and clinical application of kinesiotape. This course offers laboratory experience with Kinesio® Tex Tape. Participants will practice taping skills on each other and the canine patient. Biomechanical and taping principles as applied to the quadruped model will be thoroughly reviewed. Additional advanced taping principles in complex sports injuries and post-operative cases will be reviewed.

Learning Objectives:

- Participants will identify properties of materials, and whether taping facilitates or inhibits muscles, tendons, and ligaments to maximize normal kinematic motion of a joint
- Participants will demonstrate a solid understanding of the basic Kinesio® Tex Tape design principles and application involved in custom-taping muscle areas in the quadruped model
- Participants will describe a typical evaluation, and set goals for kinesiotape use
- Participants will demonstrate good beginning skills in using Kinesio® Tex Tape on the quadruped model
- Participants will demonstrate problem-solving skills in selecting appropriate taping techniques for common and advanced sports-related injury, post-operative function, and injury prevention
- Participants will identify areas of “O” tension and therapeutic zone

Course Outline:

Introduction: (15 minutes)

- Dr. Kenzo Kase
- KT method
- Kinesio® Tex Tape

Lecture: Review kinesiotape applications in human medicine (15 minutes)

- Sports medicine applications / Olympics
- Kinesio® Tex Tape composition
- Identify zones on tape applications

Lab: Tape applications (30 minutes)

- Application on self / persons to experience properties of Kinesio® Tex Tape
- Application indications [sports vs. injury vs. injury prevention]
- Review common conditions indicating use of Kinesio® Tex Tape

Lecture: Kinesio® Tex Tape physiological effects on vertebrates (35 minutes)

- Skin
- Circulatory / lymphatic
- Fascia
- Muscle
- Joint
- Physiological applications for common conditions

Lab Taping Techniques (15 minutes)

- Basic application
- Paper off
- 25% tape tension
- 50% tape tension
- 100% tape tension
- Circulatory tape application

Lab Taping Techniques (45 minutes)

- Lumbosacral tape applications
- Post-operative spine surgery tape applications [thoracic and cervical spine]
- Biceps tendonitis
- Iliopsoas sprain / strain tape applications
- Calcaneal tape applications
- Open discussion / open applications – audience interest

Management of Musculoskeletal Dysfunction with Proprioceptive Neuromuscular Facilitation (PNF)

Instructor: *Amie Lamoreaux Hesbach, MSPT, CCRP, CCRT*

Course Description: This portion of the *Practical Approaches to Rehabilitative Medicine: Advanced Techniques in Physical Therapies* course is designed to provide the canine rehabilitation practitioner with a novel manual approach to management of musculoskeletal dysfunctions, including muscle strains, imbalances, and weaknesses of contractile tissues. Evaluative and treatment philosophy, procedures, methods, and techniques, borrowed from Proprioceptive Neuromuscular Facilitation (PNF), will be taught in a participatory lecture format. Hands-on laboratories will allow the participant adequate practice so to be confident in the application of PNF in canine patients with orthopedic, performance (sports medicine), and neurologic disorders.

Learning Objectives:

- Participants will evaluate musculoskeletal tissues of the canine pectoral and pelvic girdles utilizing the PNF "clock" method
- Participants will utilize PNF techniques to re-educate appropriate muscle length and tension relationships in the canine patient
- Participants will apply PNF philosophy, procedures, methods, and techniques in functional rehabilitation treatment planning and home exercise program prescription

Course Outline:

Lecture: Musculoskeletal impairments encountered in canine rehabilitation (105 minutes)

- Introduction to PNF
  - PNF philosophy
  - PNF procedures (**interactive lecture**)
  - PNF techniques

Lab: PNF Pectoral Girdle (25 minutes)

- Review of pertinent anatomy/physiology
- PNF "clock" and applications to the canine pectoral girdle

Lab: PNF Pelvic Girdle (25 minutes)

- Review of pertinent anatomy/physiology
- PNF "clock" and applications to the canine pelvic girdle

Physical Therapy Differential Diagnostics for the Lumbo-Pelvic-Hip Region

Instructor: *Laurie Edge-Hughes, BScPT, MAnimSt (Animal Physio), CAFCI, CCRT*

Course Description: This portion of the *Practical Approaches to Rehabilitative Medicine: Advanced Techniques in Physical Therapies* course is designed to provide participants with the background theory and hands-on skills to confidently perform a physical assessment of the lumbo-pelvic-hip region in the dog. Physical therapy assessment skills and clinical reasoning will be highlighted.

Learning Objectives:

- Participants will gain a functional understanding of lumbo-pelvic-hip region anatomy
- Participants will be able to identify the pain-generating conditions, structures, and mechanisms for the lumbo-pelvic-hip region
- Participants will be instructed in physical therapy clinical reasoning and physical tests to identify patho-anatomical and patho-functional conditions of the lumbo-pelvic hip region
- Participants will better understand what physical finding may indicate the necessity for further diagnostic testing

Course Outline:

Lecture: Assessment of the canine lumbar spine, pelvis, and hip (45 minutes)

- Review of anatomy and biomechanics of the lumbar spine, pelvis, and hip
    - Joint, soft tissue, and neural structures will be highlighted
- Discussion of the potential generators for pain in each of the 3 selected areas
- Subjective history and observations pertaining to the lumbo-pelvic-hip region

Lab: Physical assessment techniques for differential functional diagnosis between muscle, disc, nerves, facet joints, or vertebra in the canine lumbar spine (40 minutes)

- Techniques to identify key muscular weakness or myofascial trigger points
- Techniques to identify intervertebral disc disease, degenerative disc disease, or spondylosis
- Techniques to identify neural impingement or inflammation
- Techniques to identify facet joint hypomobility

Lab: Physical assessment techniques for differential functional diagnosis at the canine pelvis (40 minutes)

- Techniques to identify form closure, force closure, and motor control dysfunctions at the sacroiliac joint

Lab: Physical assessment techniques for differential functional diagnosis of both soft tissue and joint issues at the canine hip (40 minutes)

- Techniques to identify hip joint conditions such as canine hip dysplasia, Legg Calvé Perthes disease, and early or late stage osteoarthritis
- Techniques to identify soft tissue injuries such as muscle strains, tendinitis / tendinosis lesions, weakness, myofascial trigger points, and bursitis