

Appendix III B

Curriculum for Canine Sports Medicine and Rehabilitation to be Tested in Canine Species Examination

The goal of this curriculum is to develop the proper “knowledge of action” in relation to the:

Presenting injury, medical problem or performance issue

Breed and capabilities of dog

Prior physical state

Type and demands of activity

Owner or trainer expectations

The veterinary sports medicine and rehabilitation practitioner should be capable of correctly diagnosing and providing an effective treatment or management plan for a specific injury or illness or performance limiting issue using one or more acceptable procedures or processes (as defined by the specialty) while avoiding unacceptable practices. Therefore, the basic goal of this curriculum is to establish a defined and predetermined level of proficiency in managing sports medicine or rehabilitation cases.

Course Outline

Foundation of Sports Medicine and Rehabilitation

List and understand canine athletic events and working dog tasks

Understand components of normal canine locomotion

Understand components of abnormal canine locomotion

Understand locomotion as it applies to athletic and working events

Canine energetics

Canine exercise physiology

Nutrition of the canine athlete and working dog

Musculoskeletal physiology and injury

Biology of tissue healing, disuse and remobilization

Understand problems of geriatric animals and methods of rehabilitation

Problem Identification

Understanding the needs of the patient

Acquiring proper history in relation to the problem

Sports medicine and rehabilitation decision tree

Diagnostic techniques

Delineating primary problems from secondary or tertiary problems

Therapeutic Decisions

Critical Level of Problem

Emergency Classifications

- Life Threatening

- Not Life Threatening

Medical Related Issues

- Performance or Activity Related

- Determine System Involvement

 - System not identified

 - Refer to internal medicine specialist

 - System identified

 - Assess level of involvement

- Determine Level of Involvement

 - Severe system involvement

 - Refer to internal medicine specialist

 - Non severe involvement

Infectious Etiology

- Determine Proper Initial Treatment

- Establish Problem Management

- Establish Assessment of Treatment Success

- Develop Alternative Regimens

Metabolic Etiology

- Determine Proper Initial Treatment

- Establish Problem Management

- Establish Assessment of Treatment Success

- Develop Alternative Regimens

Musculoskeletal Disorder

- Surgical

 - Refer to surgical specialist

Nonsurgical

Primary problem

Determine proper initial treatment

Establish problem management

Establish assessment of treatment/ rehabilitation success

Develop alternative regimens

Secondary/tertiary problems

Determine proper initial treatment

Establish problem management

Establish assessment of treatment/ rehabilitation success

Develop alternative regimens

Rehabilitation

Assess current condition

Whole Body

Specific Structure

Establish Client Expectations

Best case scenario

Realistic scenario

Primary Problem

Determine Proper Initial Rehabilitation Program

Establish Assessment of Treatment/ Rehabilitation Success

Develop Alternative Regimens

Secondary/Tertiary Problems

Determine Proper Initial Rehabilitation Program

Establish Assessment of Treatment/Rehabilitation Success

Develop alternative regimens

Sports Medicine and Rehabilitation Problems and Injuries, Treatment Methodologies and Procedures

Systems

Cardiovascular

Sports/Activity Specific

Cause/prevention

Treatment considerations
Metabolic Pathologies
Effect on performance
Treatment considerations
Respiratory
Sports/Activity Specific
Cause/prevention
Treatment considerations
Metabolic Pathologies
Effect on performance
Treatment considerations
Urogenital
Sports/Activity Specific
Cause/prevention
Treatment considerations
Metabolic Pathologies
Affect on performance
Treatment considerations
Gastrointestinal
Sports/Activity Specific
Cause/prevention
Treatment considerations
Metabolic Pathologies
Effect on performance
Treatment considerations
Integumentary (skin, nails & pads)
Sports/Activity Specific
Cause/prevention
Treatment considerations
Metabolic pathologies
Effect on performance
Treatment considerations
Reproductive

Sports/Activity Specific

Cause/prevention

Treatment considerations

Metabolic Pathologies

Effect on performance

Treatment considerations

Nutrition

Sports/Activity Specific

Cause/prevention

Treatment considerations

Metabolic Pathologies

Effect on performance

Treatment considerations

Fluids, Electrolytes, Hematology, and Immunology

Sports/Activity Specific

Cause/prevention

Treatment considerations

Metabolic Pathologies

Effect on performance

Treatment considerations

Musculoskeletal

Muscles

Grade 1 injuries myositis

Grade 2 injuries - partial muscle tears

Grade 3 injuries - complete muscle ruptures

Commonly affected muscles in different breeds and types of exercise

Axial Skeleton

Skull

Sports/Activity Specific injuries

Breed Specific Issues – Skull Conformation

Cause/Prevention

Treatment Considerations

Rehabilitation

Cervical vertebrae

Sports/Activity Specific Injuries

Breed Specific Issues

Cause/Prevention

Treatment Considerations

Rehabilitation

Thoracic vertebrae

Sports/Activity Specific Injuries

Congenital, Developmental and Acquired Lesions

Cause/Prevention

Treatment Considerations

Rehabilitation

Lumbar vertebrae

Sports/activity specific injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Sacrum and coccygeal vertebrae

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Appendicular skeleton

Scapulothoracic junction

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Scapula

Sports/activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Glenohumeral joint

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Humerus

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Elbow

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Radius/Ulna

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Carpus

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Metacarpal Bones

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Metacarpophalangeal Joints (Fore and Hind)

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Phalangeal/Interphalangeal (Front and Rear)

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Sacroiliac Joint

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Pelvis

Sports/Activity Specific Injuries

Cause/Prevention

Treatment considerations

Rehabilitation

Hip

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Femur

Sports/activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Stifle – Femoropatellar and Femorotibial Joints

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Tibia and Fibula

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Tarsus

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Metatarsal Bones

Sports/Activity Specific Injuries

Cause/Prevention

Treatment Considerations

Rehabilitation

Metatarsophalangeal Articulations

Sports/Activity Specific Injuries

Cause/prevention

Treatment Considerations

Rehabilitation

Sports Medicine and Rehabilitation Related Topics

Exercise and training

Pain

Proprioception

Flexibility

Strength

Endurance

Pharmacology and withdrawal times

Therapeutic modalities

Competitive environments

Ground and track surfaces

Harness, muzzles, training aids