

SUBJECT NAME: Prevention and Treatment of Sports (Athletic) Injuries

SUBJECT DESCRIPTION

This subject provides exposure and practical training in the management of injuries in an athletic population, including prevention, recognition, and immediate care of a wide spectrum of common athletic injuries and health problems that may affect performance. Techniques include musculoskeletal assessment, emergency care and management. The content covers taping and splinting supports, the appropriate use of heat, ice (cryotherapy), stretching, and manual therapy skills. The content will complement the knowledge of healthy, uninjured, and clinical populations obtained elsewhere. Learning will focus on common orthopaedic assessment techniques, along with those for field side assessment of heat injury and dehydration.

CONTENT COVERED

- Client safety, preliminary screening, and risk classification/stratification
- Client health history and informed consent
- Inflammation and Healing, including cellular changes, mechanisms of inflammation, acute and chronic inflammation, and the healing process
- The role of training types in enhancing sport performance and function, such as localized stability.
- The acute effects of sports injury related pain on motor recruitment and dysfunction
- The inherent performance factors in various sports as they relate to injury prevention and treatment
- The influence of absolute and relative contraindications on treatment recommendations and program design following athletic injury
- Assessment of orthopaedic soft tissue injuries (STI's), such as sprains, strains, tears, bursitis and tendinopathies

KEY PERFORMANCE INDICATORS (KPIs)

1. Applies knowledge and communicates risk factors in obtaining client informed consent prior to assessment and treatment.
2. Follows safe, evidence-informed exercise practices in care provision.
3. Recognizes when exercise is contraindicated to ensure client safety and prevent injury or re-injury, and which corresponds with the treatment goals and needs of the client.
4. Considers and utilizes relevant client information on the environment, comorbidities and medications in care planning.
5. Considers and recognizes the functional demands necessary for sport performance in different environments (e.g., warm, cold, humid, aquatic).
6. Considers the impact of injury on the ability to safely return to play/participation.
7. Considers the reaction of the body to injury (e.g., cellular adaption/tissue responses, neoplasia/anaplasia, cellular degeneration/ necrosis, infective agents, pain) and disease.
8. Applies knowledge pathology of musculoskeletal, neurological, cardiopulmonary, neoplastic, and metabolic disorders and conditions when assessing sports injuries.
9. Demonstrates competency in identifying the need for, and conducting assessment of, orthopaedic, heat related, and concussion type injuries to the body within the kinesiologist's scope of practice.

10. Explains and takes into consideration the pathophysiological process of inflammation and repair.
11. Develops and implements a plan to alter and/or improve function and ability to achieve desired outcomes with the client's consent.
12. Explains the body's response and adaptation to exercise, sport performance, including the inherent risks commonly associated athletic and sport performance.
13. Continuously evaluates the pathological adaptations and responses to exercise to progress athletic performance to pre-injury state.