UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Upper Quarter Impairments

2425-3-I0201D144-I0201D228M

Aims

Describe the kinesiology of the muscles of the upper quadrant (thoracic-scapular-cervical), paying particular attention to the synergistic actions and the role of force couples
Identify the characteristics of movement dysfunction syndromes of the thoracic-scapular-thoracic-glenohumeral-cervical region
Conduct an assessment for signs, symptoms and contributing factors and establish a primary and, if necessary, secondary diagnosis.
Create a specific treatment program that modifies the activities that contribute to the establishment of movement dysfunction syndrome.
Create a specific exercise program that modifies dysfunctional contributing factors

Contents

This course presents the concepts and principles regarding the theory on the balance of the movement system and its relationships with Movement Dysfunction Syndromes, which are syndromes of mechanical musculoskeletal pain of the upper quadrant (thoracic-scapula-humeral-cervical). At the end of this path the student will be able to discuss the concept of directional susceptibility of a joint to a movement, and tissue adaptations associated with repeated movements and maintained postures. The course will teach you to identify dysfunctions of alignment, muscle lengths and movement patterns and their relationships with musculoskeletal pain syndromes.
The signs and symptoms of movement dysfunction syndromes will also be described. Participants will be taught the test used to identify movement system dysfunction, which includes: 1) movement tests, 2) alignment assessments, 3) muscle length tests, 4) muscle strength tests, and 5) analysis of movement patterns during specific joint movements and functional activities. Much emphasis will be placed on the significance of developing a precise therapeutic exercise program and correcting postural defects and movements associated with functional activities.

Detailed program

Scapular movement dysfunction syndromes. Internal rotation (with anterior tilt-caudal rotation-abduction) - Depression with abduction-adduction-elevation
Humeral movement dysfunction syndromes: anterior-superior glide-hypermobility-hypomobility-medial rotation
Cervical movement dysfunction syndromes: extension with rotation.extension, flexion with rotation, flexion
Posture and movement analysis
Examples of clinical cases Dysfunction of the muscular component, biomechanics and motor control - discussion
Physical examination: observation of posture, evaluation of alignment, tests in orthostatism, in supine position, in prone position, in lateral decubitus, in quadrupedal position, in sitting position.
Upright tests, supine, prone, side lying, quadruped tests, sitting and step tests, gait assessment. Work in groups Full assessment, clinical reasoning, formulation of a diagnosis based on movement system impairments of the lower quarter; treatment plan. Discussion of the clinical cases. Verification of the diagnosis and of the treatment plan.
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Prerequisites

Access granted to 3rd year students who have passed all the 2nd year exams

Teaching form

Teaching (DE) 18 hours
Interactive teaching (TEL-DI) 4 hours (tasks, group work, formative assessments, etc.).
Interactive teaching (DI) 2 hours with the nature of questionnaires or ongoing tests.

Textbook and teaching resource

- Valutazione e trattamento delle Sindromi da Disfunzioni del Movimento Autore: Shirley Sahrmann Edizione italiana a cura di: G. Barindelli Editore: UTET Scienze Mediche 2005, 480 pagine
- Movement System Impairment Syndromes of the Extremities, Cervical and Thoracic Spines - Shirley Sahrmann Elsevier Health Sciences, Nov 19, 2010
- Slide in Power point

Semester

1st semester

Assessment method

Multiple choice test comprising 5 questions with only one correct answer and Open questions
Practical exam: clinical examination peer to peer
The correctness and consistency of the answers with respect to the question asked will be evaluated
Ongoing practical evaluations are planned

Office hours

By appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING