UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Clinics

1920-3-H4102D018-H4102D055M

Aims

At the end of the course/activity block, the student will be able to:

§ Approach an orthopaedics and traumatology patient

§ Harvest an orthopaedic and traumatological medical history

§ Use the appropriate terminology to communicate with patients and medical staff

§ Identify, examine and describe the main pathological symptoms and signs in relation to orthopaedic and traumatological pathology. Highlight on a multidisciplinary approach, exploiting the PBL Method.

Theory and practical skills to perform the basic clinical examination tests in general orthopaedics and traumatology.

Contents

Metabolic bone diseases

Rheumatologic disorders

Skeletal and extraskeletal calcification/ossification syndrome

Osteoarticular infections

Overload syndroms of tendon, muscles and joints

Osteonecrosis and osteoarthrosis

Complex regional pain syndrome

Basis of hand surgery

Traumatology - General principles

Principles of orthoplastic- and microsurgery

Dieseases and injuries by site

Detailed program

§ Metabolic bone diseases

- o Osteoporosis
- o Osteomalacia
- o Hypophosphatasia
- o Renal osteodystrophy
- o Vitaminosis
- o Pharmacologic metabolic bone disease

§ Rheumatologic disorders

- o Rheumatic arthritis
- o Crystal induced arthritis
- o Transient arthritis
- o Pathology of the synovium

§ Skeletal and extraskeletal calcification/ossification syndrome

- o Tumoral calcinosis
- o Renal disease
- o Posttraumatic calcification / myositis ossificans (traumatic and not traumatic)

- Calcific myonecrosis and tendinitis
- Periarticular crystal deposition (Milwaukee Shoulder, gout)
- Sclerosing bone dysplasias

§ Enostosis

§ Osteopetrosis

- Ossicles

§ Osteoarticular infections

- Ostemyelitis
- Septic arthritis
- Spondylodiskytis

§ Sport Injuries

Athlete evaluation

Overload syndroms of tendon, muscles and joints.

Muscolar lesions.

Ankle sprain.

§ Osteonecrosis and osteochondrosis

§ Osteoarthrosis

§ Complex regional pain syndrome

§ Basis of hand surgery

- Surgical anatomy of the hand

- Compression neuropathy
- Infections of the hand
- Tendon injuries
- Fibromatosis (Dupuytren)
- Fractures and dislocation of the wrist, carpus and hand

§ Traumatology - General principles

- General evaluation of a fracture
- Basics of fracture classification
- Polytrauma - principles of ATLS
- Child abuse

§ Principles of orthoplastic- and microsurgery

- Principles of reconstructive surgery
- Principal flaps in orthopaedics and traumatology

§ Hip

- Nerve entrapment syndroms
- Hip dysplasia
- FAI
- Fractures of the femur and pelvis; Fractures and dislocation of the hip.

§ Knee

- Meniscal injuries
- ACL/PCL injuries
- Collateral ligament injuries

- Malalignment
- Fractures and dislocation of the knee and leg

§ Foot and ankle

o Ligamentous injuries

o Deformities of the toes

o Neurological disorders

§ Nerve entrapment syndroms

§ Interdigital neuroma

§ HMSN (*Hereditary* motor and sensory neuropathies / Charcot-Marie-Tooth)

o Fractures and dislocations of the foot and ankle

§ Shoulder

o Instability

o Nerve entrapment syndroms

o Rotator cuff diseases

o Fractures and dislocation of the shoulder and humerus

§ Elbow

o Nerve entrapment syndroms

o Ligament injuries and instability

o Tendon injuries

o Fractures and dislocation around the elbow

§ Rehabilitation medicine

o Amputations and prostheses

Orthoses

§ Paediatric Orthopaedics

o Developmental Dysplasia of Hip

o Paediatric Foot Disorders (clubfoot , Flexible pes planus, accessory bones, Vertical talus and tarsal coalition)

o Epiphyseal Growth-Plate Injuries

o Congenital Muscolar torcicollis

o Idiopathic and congenital scoliosis

o Scheurmann’s disease

o Spondylolysis / spondylolisthesis

o Limb Length Discrepancy

o Slipped Capital Femoral Epiphysis

o Osteochondrosis (Legg Perthes Calve disease; Osgood-Schlatter disease ; Sever Disease) Osteochondritis dissecans

Prerequisites

Basic knowledge of anatomy, physiology and biochemistry.

Teaching form

Frontal lectures.

Clerkship program, with rotation in small groups (about max 10 students) in surgical specialties, general practitioner and in the emergency department:

- PBL / CBL

- Practice sessions with puppets or among students/teachers

- Attending clinical wards

Textbook and teaching resource

Orthopaedic Pathology 3rd Ed. Vigorita Vincent J. Wolters Kluwer. ISBN-13: 978-1451192025 ISBN-10: 9781451192025

Oxford Handbook of Orthopaedics and Trauma. Gavin Bowden, Martin McNally, Simon Thomas, and Alexander Gibson. Oxford university press. ISBN: 9780198569589

Physical Examination for Surgeons: An Aid to the MRCS OSCE. Petrut Gogalniceanu, James Pegrum, William Lynn. Cambridge ed. ISBN-13: 978-1107625549 ISBN-10: 1107625548

Gray's Anatomy: The Anatomical Basis of Clinical Practice. 41th Ed. Susan Standring. Elsevier. ISBN-13: 978-0702052309; ISBN-10: 0702052302

Semester

Assessment method

Ongoing tests after each PBL/PCL (PBL-restitution):

- Short essay (eventually also in groups)
- Practical tests/maneuvers
- Short paper/composition in relation to problems treated with PBL/PCL
- Multiple choice tests

Final locomotor vertical track test:

- Multiple choice tests
- Practical tests/maneuvers
- Collection of the single short papers/compositions
- Development of clinical skills is assessed by OSCE (Objective structured clinical examination). Each OSCE faces the student with a unique clinical case which will test particular skills such as history-taking, physical examination, practical tests/maneuvers, communication skills, test/data interpretation, medical decision-making. Each student receives feedback from the assessor as well as overall scores for each OSCE.

Office hours