UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Neurology

2425-5-H4102D034-H4102D135M

Aims

The aim of the course is:
? To recognize signs and symptoms of neurological disorders through deep knowledge of physiopathology and semeiology of nervous system dysfunction.
? To learn the nosology and clinical expression of the main neurological diseases.

Contents

It will be provided elements to collect an adequate medical history, including family history, to perform a complete neurological evaluation through the application of the principles of neurological semeiotics, to formulate the differential diagnostic hypotheses, to identify the appropriate exams to be performed and the priority of their execution, to refine the ability to interpret the results and their congruity with the patient's clinical history, to integrate the data in order to formulate an etiological diagnosis and set the appropriate therapy with attention to the risk / benefit balance of the proposed therapeutic choices.
Particular attention will also be given to the aspects of communication to the patient and his/her family in compliance with privacy laws.
The instrumental Investigation
The main indications for the use of instrumental investigations complementary to the discipline, both morphological (CT, MRI, PET, Cerebral Scintigraphy, Neuromuscular Ultrasound, Doppler and ECO-Doppler TSA and Transcranial) and functional (Electromyography, Electroencephalography and Evoked Potentials).
The methods of execution and preparation for individual investigations, with practical demonstration for neurophysiological methods. From the spontaneous biological electrical signal to the provoked one. Creation of a decision-making algorithm: starting from the symptom/patient, what are the optimal paths and times for individual pathologies, starting from some pathological conditions for example:
? Cerebrovascular pathology
? Polyneuropathy
? Movement disorders

? Coma
? Epilepsy

Detailed program

The following main pathologies of the Central and Peripheral Nervous System will be addressed: acute cerebrovascular diseases (ischemic strokes, cerebral hemorrhages, cerebral venous thrombosis), degenerative diseases (Alzheimer's and other dementigen diseases; Parkinson's and other movement disorders; Amyotrophic Lateral Sclerosis and other motor neuron diseases); inflammatory diseases of the Central Nervous System (multiple sclerosis, neuromyelitis optic spectrum diseases); encephalopathies / encephalitis (toxic, dysmetabolic, autoimmune, infective, paraneoplastic); diseases of the neuromuscular junction (myasthenia and myasthenic syndromes); diseases of the peripheral nervous system; epilepsy; headache and cranial neuralgias; sleep disorders; syncopes and diseases of the vegetative nervous system.

Prerequisites

Knowledge of the neuroanatomy and physiology of the Nervous System.

Teaching form

Students will be divided into small groups of 3-4 students who will rotate in the different clinical areas: ordinary hospitalization, stroke unit, neurophysiology, first level outpatient clinic, second level outpatient clinics, emergency room. Students will be invited to personally collect the anamnesis and discuss it with their tutor, as well as to perform the neurological objective examination in the presence of the tutor who will guide them in the execution and interpretation of the results based on neurological semiotics. Diagnostic hypotheses and indications for the tests to be prescribed will be discussed together with the tutor. Performing the neurological examination, with direct demonstration of semiotics both on volunteers (among students for example) and on patients selected for:
? Peripheral Nervous System Pathology ?
? Central Pyramidal Pathology ?
? Central Extrapyramidal Pathology ?
? Disturbance of Consciousness
Regarding the neurophysiological evaluation, it will be illustrated the technologies, the methods of execution and preparation for individual investigations will be illustrated, with practical demonstration. Students, respecting privacy, will attend moments of communication with the patient during which diagnostic hypotheses, prescribed tests and therapy are shared, and informed consent is collected. Similarly, always respecting privacy, they will attend interviews with family members

Textbook and teaching resource

medical records, instrumental test reports, the patients themselves

Semester

FIRST TERM

Assessment method

monitoring - during the days of clinical activity - of the expected practical skills

Office hours

email
camillo.foresti@unimib.it
for appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION