

CoPGr CURRICULAR CHAMBER

SUBJECTS PRESENTATION FORM

SUBJECT'S ACRONYM: **RNP5738**

SUBJECT'S NAME: Electroneuromyography

CURRICULUM/AREA: Neurology/17140

FOCAL AREA: Neurology

INITIAL VALIDITY (Year/Semester):

N. OF CREDITS: 04

Theoretical Classes: 08 Practical Classes, Seminars and Others: 02 Hours of Study: 05
DURATION IN WEEKS: 4

PROFESSOR(S) IN CHARGE:

USP Professor, n. 93273 – Wilson Marques Junior

ACTUAL COSTS OF THE SUBJECT: BRL (Presenting, if applicable, the budget foreseen for the year, as an attachment)

PROGRAM

OBJECTIVES:

Study of the clinical neurophysiology of the peripheral nerve, of the neuromuscular junction and the sick muscles.

JUSTIFICATION:

The study and the understanding of the neuromuscular diseases significantly depend on the neurophysiological methods which assess and quantify the functions of the nerve, muscle and neuromuscular junction, enabling an accurate diagnosis, quantification of the abnormality and monitoring. Therefore, they are a really important instrument in any of these diseases. Recently, with the perspective of introducing therapeutic essays, the quantification offered by neurophysiological methods is the golden standard. Along this course, techniques that allow the qualitative and quantitative analysis of such structures in pathological normal and abnormal conditions will be introduced.

CONTENT (SYLLABUS):

Basic program:

a) Theoretical Classes:

- Nerve excitation and conduction
- Principles of the needle examination
- Neuromuscular transmission
- Classification of neuromuscular diseases

Seminars:

- Neurophysiological consequences of the demyelination
- Neurophysiology of the acquired demyelinating neuropathies
- Neurophysiology of the hereditary demyelinating neuropathies
- Disturbances on the conduction of acute comprehensive neuropathies

- Disturbances on the conduction of the chronic comprehensive neuropathies and by strangulation
- Neuromuscular transmission in presynaptic diseases of the neuromuscular junction
- Neuromuscular transmission in postsynaptic diseases of the neuromuscular junction
- The needle examination in the myopathies
- Principles of single -fiber electromyography
- Motor unit counting
- Register of the sensitive action potentials with superposed electrodes
- Study of axonal excitability
- The electroneuromyographic examination of the lower motor neuron
- The electroneuromyographic examination in the upper motor neuron diseases
- Late answers
- The refractory period

Practical classes:

- The study of conduction
- The needle examination
- The study of neuromuscular junction
- Motor unit counting

EVALUATION METHOD:

Seminar and report

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