UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Emergency

2425-5-H4102D032-H4102D130M

Aims

- To understand pathophysiology of acute derangements of consciousness requiring ICU admission
- To define life-saving procedures in acute brain injuries
- To learn invasive and non invasive methods of brain monitoring in the ICU setting

Contents

- Coma
- Traumatic brain injury
- Postanoxic encephalopathy
- Severe ischemic and hemorrhagic stroke
- Status epilepticus
- Brain death and organ donation
- Postoperative neurosurgery
- Neuromonitoring

Detailed program

Neurocritical care is a subspecialty of intensive care medicine dedicated to providing comprehensive management for all life-threatening neurological disorders and their complications. Improved understanding of pathophysiology and advances in monitoring and imaging techniques have led to the introduction of more effective and

individualized treatment strategies that have translated into improved outcomes for patients. As the knowledge base underpinning the practice of neurocritical care has increased and evidence of outcome benefits has emerged, there has been a commensurate growth in the subspecialty of neurocritical care and in neurointensivists and their specialist teams. The delivery of effective neurocritical care requires an understanding of underlying physiological and pathophysiological processes in addition to interpretation of subtle changes in clinical status and in neuromonitoring and neuroimaging variables. Critically ill neurological patients require meticulous general intensive care support to optimize systemic organ system function and provide an optimal physiological environment for neurological recovery, as well as interventions targeted to their neurological disorders. The management of acute brain injury is particularly complex and requires a coordinated and stepwise approach that includes clinical assessment, monitoring, and multifaceted management strategies targeted to minimize secondary neurological injury. Collaboration and cooperation between clinicians from multiple disciplines is crucial to the effective delivery of care.

Prerequisites

Basic knowledge of resuscitation and intensive care

Basic knowledge of neurology

Teaching form

The teaching will be performed through frontal lectures and discussions of interactive clinical cases

Textbook and teaching resource

Oxford Textbook of Neurocritical Care Martin Smith, W. Andrew Kofke, Guiseppe Citerio Oxford University Press, 7 apr 2016

Updated articles distributed during the course

Semester

Second semester

Assessment method

Written and oral exam

Office hours

Available on appointment while in Bergamo for teaching activities (write an email with the request to giuseppe.citerio@unimib.it)

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING