



The 2nd International Neurotrauma Congress & the 4th International Roads Safety Congress

Shefa Neuroscience Research Center, Tehran, Iran, 18-20 February, 2015

The Neuroscience Journal of Shefaye Khatam

Volume 2, No. 4, Suppl. 3

Oral Presentation

Report of the Milan Consensus Conference About Clinical Applications of Intracranial Pressure Monitoring in Traumatic Brain Injury

Reza Ghadirpour*, Corrado Iaccarino, Alessandro Villa, Maria Luisa Caspani*, Franco Servadei

Neurosurgery Unit, Neuromotor Department, IRCCS "Arcispedale Santa Maria Nuova" of Reggio Emilia, Reggio Emilia, Italy.

Neurosurgery-Neurotraumatology Unit, Emergency Department, University Hospital of Parma, Parma, Italy.

Department of Anesthesia and Intensive Care, University Hospital of Parma, Parma, Italy.

Published: 18 February, 2015

Abstract

In recent years, the usefulness of intracranial pressure (ICP) monitoring has been questioned in several reports for traumatic brain injury (TBI) management. Therefore the needs of multidisciplinary groups of discussion of neurosurgeons and neurointensivists to update practical applications of ICP in severe adult TBI has been advocated in many parts of the world. A consensus conference was held in Milan on October 5, 2013, putting together neurosurgeons and intensivists with recognized expertise in treatment of TBI. Four topics have been selected and addressed in pro-con presentations: 1) ICP indications in diffuse brain injury, 2) cerebral contusions, 3) secondary decompressive craniectomy (DC), and 4) after evacuation of intracranial traumatic hematomas. The participants after elaborating the existing published evidence (without a systematic review) and their personal clinical experience provided some drafts. After remarks and further contributions were collected, a final document was approved by the participants. The group made the following recommendations: 1) in comatose TBI patients, in case of normal computed tomography (CT) scan, there is no indication for ICP monitoring; 2) ICP monitoring is indicated in comatose TBI patients with cerebral contusions in whom the interruption of sedation to check neurological status is dangerous and when the clinical examination is not completely reliable. The probe should be positioned on the side of the larger contusion; 3) ICP monitoring is generally recommended following a secondary DC in order to assess the effectiveness of DC in terms of ICP control and guide further therapy; 4) ICP monitoring after evacuation of an acute supratentorial intracranial hematoma should be considered for salvageable patients at increased risk of intracranial hypertension with particular perioperative features.

Keywords: Traumatic Brain Injury, Intracranial Pressure, Decompressive Craniectomy.

***Corresponding Author:** Reza Ghadirpour

E-mail: Reza.Ghadirpour@asmn.re.it