

Traumatic Brain Injury : A Global View

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There are important disparities in the number of neurosurgeons around the World . Even in Asia we can have as much as 5 neurosurgeons/100000 inhab or as little as 0.09 /100000 inhab. The workforce is important particularly to deal with neurosurgical emergencies and trauma . A recent paper (Dewan et al JNS, 2018) showed over 40% of worldwide neurosurgical activity is dedicated to trauma care . Also in developed countries neurotrauma patients constitute over 20% (japan) and from 15 to 35% (Europe) of neurosurgical activity . There are important differences in the epidemiology and management of TBI patients in different parts of the world . In Western countries (USA, Canada; Europe, japan , Australia) the patients' mean age is over 50 years , fall is the main cause of trauma, most patients have significant co-morbidities and the more frequent hematomas are contusions and chronic subdural hematomas. In developing countries where trauma is an endemic disease , patients' mean age is ranging from 20 to 30 years , road traffic accidents are by far the most important cause of trauma and acute extradural and subdural hematomas are the most frequent lesions .

If we consider the most frequent surgical intervention in trauma (skull decompression) all the recent clinical trials (DECCRA and RESCUEicp) were conducted in high income countries . The results of the RESCUE icp trial shift in favour of a surgical approach only after 12 months from injury . How many countries can assist trauma patients for as long as twelve months??? A recent paper (Gupta D et al, World Neurosurg , 2016) compared mortality in two centers one in USA , Seattle , and one in India ,New Dehli. In the presence of a good compliance to the guidelines from both Centers , the mortality on discharge was similar . In the absence of intensive rehabilitation , mortality significantly increased at follow up in India but not in the States where the patients received long term care....

More, In how many low/middle income countries decompressive surgery is a preventive measure to avoid follow up CT scans and long ICU stay?

In conclusion both epidemiology and surgical care of tBI are different in different areas of world . Improving care of our patients means understand differences and take care of them....