

# An Overview of Neurotrauma

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Neurotrauma is a life-threatening public health issue that deserves the attention of the world's health community. The brain and spinal cord injury occurrence estimation indicates that these injuries cause enormous losses to individuals, families, and communities. Neurotrauma result in a large number of deaths and impairments which leads to permanent disabilities. Researchers has also shown that TBI (Traumatic Brain Injury) requires long-term care and may incurs economic cost to health systems. For this reason, several countries need to develop surveillance systems and conduct studies to measure the impact of neurotrauma among their people to guide the development of more effective preventive methods. Number of methods has already proven effective, like use of motorcycle helmets, head supports in vehicles or on sports equipment [1].

Neurotrauma continues to be an important cause of morbidity and mortality. Prevention of primary neuro injuries is a critical public health concern. Early assessment of the individual and thorough with neurotrauma with high index of misgiving of traumatic spinal cord injuries and traumatic vascular injuries requires multidisciplinary approach involves in the pre-hospital providers, neurosurgeons, emergency physicians, and neurointensivists. Critical care management with neurotrauma is focused on the prevention of secondary injuries of the individual. More research is needed for the potential neuroprotection therapies [2].

Optimal trauma care includes head and spinal cord injury, which requires system organization and adoption throughout the world. Neurosurgeons play an important role in the system design and development in addition to treating neurotrauma individuals. Involvement of neurosurgical areas includes defining the pre-hospital triage and treatment guidelines, emergency department evaluation and therapy, operative management, and active involvement in the critical care and acute hospital settings. Collaboration among all members of the trauma team is essential to ensure the best possible outcome for patients with traumatic injuries [3].

The AANS (Advances in Artificial Neural Systems) and CNS (Central Nervous System) support the theory of organized neurosurgical trauma care that consists of the appropriate combination of prepared communities and institutions of adequate numbers of committed neurosurgeons. The further support ACS guidelines regarding institutions designated to receive trauma individuals and support the concept of pre-hospital triage of trauma victims based on well-trained EMS (Emergency Medical Services)

personnel guided selected by the local neurosurgical community and also its criteria. A neurosurgeon assesses and improves the quality of neurotrauma care. By using these principles outlined above, neurosurgeons can plan, support, and evaluate the system of community or region which requires the optimal care of the neurotrauma individual [4,5].

## References

1. [https://www.who.int/violence\\_injury\\_prevention/road\\_traffic/activities/neurotrauma/en/](https://www.who.int/violence_injury_prevention/road_traffic/activities/neurotrauma/en/)
2. Chang, Wan-Tsu W, and Badjatia, Neeraj. "Neurotrauma". *Emerg Med Clin North Am* 32(2014):889-905.
3. Pitts, LH. "Neurotrauma and trauma systems". *New Horiz* 3(1995):546-548.
4. "Neurotrauma care and the neurosurgeon". *Bull Am Coll Surg* 72(1987):17-19.
5. Pitts, LH. "The neurosurgeon and neurotrauma care system design". *Clin Neurosurg* 34(1988):618-29.

**How to cite this article:** Teresa, Maria. An Overview of Neurotrauma. *Int J Neurorehabilitation Eng* 8 (2021) doi: 10.37421/ijn.2021.8.400

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Received 08 April 2021; Accepted 23 April 2021; Published 30 April 2021