

NEUROBIOLOGICAL CONSEQUENCES OF TRAUMATIC BRAIN INJURY

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Abstract:

Traumatic brain injury (TBI) is a worldwide public health problem typically caused by contact and inertial forces acting on the brain. Recent attention has also focused on the mechanisms of injury associated with exposure to blast events or explosions. Advances in the understanding of the neuropathophysiology of TBI suggest that these forces initiate an elaborate and complex array of cellular and subcellular events related to alterations in Ca^{++} homeostasis and signaling. Furthermore, there is a fairly predictable profile of brain regions that are impacted by neurotrauma and the related events. This profile of brain damage accurately predicts the acute and chronic sequelae that TBI survivors suffer from, although there is enough variation to suggest that individual differences such as genetic polymorphisms and factors governing resiliency play a role in modulating outcome. This paper reviews our current understanding of the neuropathophysiology of TBI and how this relates to the common clinical presentation of neurobehavioral difficulties seen after an injury.

Biography:

Prof. Dr. Anil Batta is presently professor & Head with senior consultant in Govt. Medical College, Amritsar. He did his M.B.B.S. and M.D. in Medical Biochemistry from Govt. Medical College, Patiala in 1984 and 1991, respectively. His research interest is mainly in clinical application especially cancer and drug de-addiction. He has supervised more than 25 M.D., M.Sc. and Doctorate researches and published more than 130 international research papers. He is the chief editor of America's Journal of Biochemistry. He is also working as advisor to the editorial board of International Journal of Biological and Medical Research. He has been deputed member Editorial Board of numerous International & National Medical Journals of Biochemistry. He has also been attached as technical advisor to various national and international conferences in Biochemistry. He has been attached as hi-tech endocrinal, genetics and automated labs of Baba Farid Univ. of Health Sciences, Faridkot. He has chaired various sessions in the Biochemistry meets. He has been designated as member Editorial Board of various in US and other European Countries. He is also involved in various research projects at Govt. Medical, Amritsar. He has done superspecialisation in Drug-de-addiction from PGIMER, Chandigarh.