
Surgical management of closed head injury in paediatric age group

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The variations that occur in mechanical and functional aspects of brain throughout infancy and childhood are enormous. Thus the spectrum of injuries that can be seen is highly varied , and the recovery of function is quite different at each age level. The aim of the treatment of the damaged brain is to allow it the best possible environment to make their more effective recovery. Rapid and effective assessment at the scene of accident can reduce the mortality rate by up to 20% .Direct transfer of severe head injured patients to a neurosurgical intensive care unit proved to give superior results. Neurological examination remains the single most comprehensive process in the diagnostic evaluation of head injured patients and the use of different coma scale and correlates with the outcome . The Glasgow Coma Scale is the most commonly used coma scale yet the reaction level scales is gaining popularity. Computed tomography became the principal diagnostic tool in evaluation of head injury It permits rapid and safe detection and precise localization of intracranial lesions as well as skull fractures. Traumatic intracranial hematomas in the pediatric age group differ from that occurring in the adult group concerning the mechanism of injury and the response of the immature skull and brain to trauma. Clinically patients present with symptoms and signs of expanding intracranial mass lesion, and the clinical course varies according to the location and its rate of accumulation and the presence of concomitant cerebral injuries. They are diagnosed mainly using computed tomography which is superior to magnetic resonance imaging (M.R.I.) in evaluation of acute trauma as the latter needs lengthy time, lag of supportive measures during examination and expensive, and it is present only in limited areas and centers. Management of traumatic intracranial hematomas in children may be either conservative or surgical interference , depending on the clinical status of the victims and C.T scan, also operative interference in other lesions is decided according to the clinical status and radiographic indications. If operative interference is not indicated all patients with severe brain trauma should be treated in an intensive care unit.