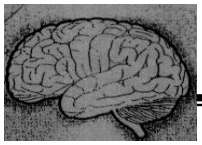


Introduction

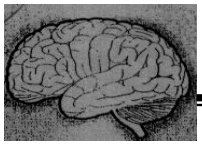
Traumatic brain injury is the general term for several different type of injury. This section covers scalp injury, skull fractures, concussions, contusions and hematomas, and cranial nerve (***Garwich 2010***).

Traumatic brain injury in children and adolescents is a major public health problem in the world, involving the annual hospitalization for acute brain trauma of about 100,000 children under 15 years of age world wide. ***(Cary & Smith, 2009).***

Head injuries in the pediatric age group (≤ 16 or 18 years) have many features that distinguish them from injuries in the adult age group. Moreover head trauma more common among infants, children and adolescents. ***(Brown. 2010).***

Traumatic brain injury is a serious and debilitating injury. Child with a severe head injury often have problems with mental and physical functions and may require on-going supervision and assistance as a result of post concussion syndrome ***(Poots, 2009).***

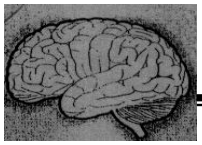
The most common causes of childhood head injuries in the world are motor vehicle accidents, falls, assaults, bicycle accidents and trauma related to sports. In infants younger than one year old, more than 95% of serious head injuries are related to child abuse ***(Nandellen, 2009).***



Child with head injury may develop disturbed consciousness, bleeding or clear fluid from the nose or ear or mouth, dizziness, loss of bowel control and other dangerous signs as repeated vomiting or nausea, headache, seizures, weakness in the extremities and loss of coordination ***(Teasdale & Jennet, 2008).***

Effects of head injury on children may include attention and arousal disorder, communication and language difficulties, in additional to loss of memory , diminished ability to learn, visual and auditory perception as mentioned by ***(Laurence, Nazarian,2010).*** Complications of head injury in children may include seizures, hydrocephalus, cerebrospinal fluid leaks, infections and cranial nerve injuries and bed sores ***(Sutton, 2008).***

The initial management of head injury includes proper history taking, cardiopulmonary stabilization, general examination, emergency measures for associated injuries (as tracheostomy, chest tubes, neck stabilization and abdominal paracentesis), proper neurolgoic examination, therapeutic agents and investigations. C.T. scanning is clearly the procedure of choice in the evaluation of the head injured patient and has probably significantly improved the outcome of management after head injury ***(Aronyk, 2010).***



Nurses have a major effective role for child with head injury such as assessment – observation – emotional support and rehabilitation role. Nurse should monitor and document the neurological signs such as level of consciousness (Glasgow Coma Scale) eye movement, verbal response and motor movement ***(Danielw & Shea, 2010).***

The nurse has important role in educating the parents of children with head injury, understandable, printed instructions should be given to the parent when child deteriorated or loss of consciousness ***(Kilian & Jane. 2008).***

Significance of The Study

Head injuries is a leading cause of death in children. It is responsible for a significant proportion of communication and language difficult and attention disorder and diminished ability to learn.

Maintaining optimum health is dependent upon compliance with invasive and regular follow up so care providers are needed to be aware of the various issues affecting compliance in children and affective control of head injury requires a good level of knowledge and self management ***(Croft & Peterson, 2007)***.