

should be evaluated for the possibility of child abuse, especially shaken baby syndrome.

The surgical management of subdural hematomas depends on the physical examination, size of the hematoma, and presence of other abnormalities on the CT scan. Various surgical options to treat subdural hematomas include transfontanel percutaneous aspiration, subdural drains, placement of burr hole, or craniotomy (Klimo, Matthews, Lew, et al, 2011).

Cerebral Edema

Some degree of brain edema is expected after craniocerebral trauma. Cerebral edema peaks at 24 to 72 hours after injury and may account for changes in a child's neurologic status. Cerebral edema associated with traumatic brain injury may be caused cytotoxic edema or vasogenic edema. Either mechanism can result in increased ICP as a result of the increased intracranial volume and changes in CBF as a result of loss of autoregulation and/or hypercapnia or hypoxia.

Diagnostic Evaluation

A detailed health history, both past and present, is essential in evaluating the child with a craniocerebral trauma. Certain disorders (such as drug allergies, hemophilia, diabetes mellitus, or epilepsy) may produce similar symptoms. Even minor traumatic injury can aggravate a preexisting disease process, thereby producing neurologic signs out of proportion to the injury.

After a minor injury, initial unconsciousness (if present) is brief, and the child ordinarily exhibits a transient period of confusion, somnolence, and listlessness; this period is most often accompanied by irritability, pallor, and one episode of vomiting. Because head injuries are frequently accompanied by injuries in other areas, the examination is performed with care to avoid further damage.

Nursing Alert

Stabilize a child's spine after head injury until a spinal cord injury is ruled out.