

produce DI with its accompanying hypertonicity and dehydration. Fluid balance is closely monitored by daily weights; accurate intake and output measurements; and serum osmolality to detect early signs of water retention.

Sedating drugs are commonly withheld in the acute phase. Headaches are usually controlled with acetaminophen, although opioids may be needed. Antiepileptics are used for seizure control. Antibiotics may be administered if lacerations or penetrating injuries. Cerebral edema is managed as described for the unconscious child. Hyperthermia is controlled with tepid sponges or a hypothermia blanket.

Surgical Therapy

Scalp lacerations are sutured after the underlying bone is carefully examined. Depressed fractures require surgical reduction and removal of bone fragments. Torn dura is sutured. Ping-pong ball skull fractures in very young infants can correct themselves within a few weeks; however, depressions larger than 5 mm may require surgical intervention ([López-Elizalde, Leyva-Mastrapa, Muñoz-Serrano, et al, 2013](#)).

Prognosis

The outcome of craniocerebral trauma depends on the extent of injury and complications. In general, the prognosis is more favorable for children than for adults. More than 90% of children with concussions or simple linear fractures recover without symptoms after the initial period. Outcomes in children with brain injuries are increasingly focused on cognitive, emotional, and mental problems. Children may experience a higher frequency of psychological disturbances after head injury than adults.

True coma (not obeying commands, eyes closed, and not speaking) usually does not last more than 2 weeks. A child's eventual outcome can range from brain death to a persistent vegetative state to complete recovery. However, even the best recovery may be associated with personality changes, including mood lability and loss of confidence, impaired short-term memory, headaches, and subtle cognitive impairments. Many children are left with significant disabilities after head injury that appear months later as learning difficulties, behavioral changes, or