TRAUMATIC BRAIN INJURY IN THE CHILD

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- Head injury in children is common and presents specific chal - lenges relating to physiology , assessment, management and safeguarding. Children have large heads compared with the rest of their bodies, predisposing to both head and neck injury . - In the case of minor head injur y , good assessment depends on winning the trust of child and parent, while identifying risk factors requiring further admission for observation or CT scan (Table 28.7). Non-accidental injury should always be considered; for example, it is key to ensure that the reported mechanism of injury is in keeping with the child’s develop - mental stage and to examine for injuries outside the normal distribution for childhood accidents. The Paediatric Glasgow Coma Scale is applied in the under-twos (Table 28.8). - Moderate and severe head injury should be managed b y a trauma team in a resuscitation room, using paediatric ATLS protocols directed at optimising physiology to prevent secondary brain injury , and with intensive car e unit (ICU) involvement for airway management as appropriate. Children with open sutures can lose substantial blood volumes into the head. Palpating the fontanelle allows direct assessment of ICP , and in all cases head and neck CT imaging are key to guiding definitive management. /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF

TABLE 28.7 UK National Institute for Health and Care Excellence criteria for computed tomography scan in children following head injury. Suspicion of NAI First seizure GCS <14 or <15 in under-ones GCS <15 2 hours post injury Signs of fracture of the base of skull Focal neurological de /f_i cit Bruise/swelling/laceration >5 /uni00A0 cm in under-ones More than one of: Loss of consciousness >5 minutes Abnormal drowsiness Four or more episodes of vomiting Dangerous mechanism Amnesia >5 minutes GCS, Glasgow Coma Scale score; NAI, non-accidental injury.

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