

PEDIATRIC SURGERY

AN APPROACH TO PEDIATRIC TRAUMA

*Vivek S

**Senthilnathan R

***Hariharan G

Abstract: Trauma is one of the common preventable causes of mortality and morbidity in children. The systematic evaluation of an injured child is an integral part of the curriculum in the training of emergency care pediatricians and pediatric surgeons. The management protocol starts with the primary survey and resuscitation, followed by secondary survey and re-evaluation. This protocol based step by step evaluation ensures that the life threatening complications are promptly identified and addressed without the risk of being overlooked. This article provides a comprehensive overview of the initial assessment and the subsequent management of pediatric trauma including the current guidelines in the initial evaluation of pediatric head trauma.

Keywords: Cervical spine, Tension pneumothorax, Fast scan.

Points to Remember

- Remember mnemonic *SAMPLE* - Signs and symptoms, allergy, medication, past history, last meal, last tetanus and event in pediatric trauma history taking.
- Triage, treatment and transfer are important in the trauma care of children.
- Primary survey in recognising life threatening injuries.
- GCS less than 8, flail chest, loss of laryngeal reflex are signs of imminent death.

References

1. Holder Y, Peden M, Krug E, Lund J, Gururaj G, Kobusingye O. Injury Surveillance Guidelines. Geneva: World Health Organization; 2001. Available from: http://www.who.int/violence_injury_prevention/media/en/136.pdf.
2. Lieh-Lai MW, Theodorou AA, Sarnaik AP, Meert KL, Moylan PM, Canady AI. Limitations of the Glasgow Coma Scale in predicting outcome in children with traumatic brain injury J Pediatr 1992; 120:195-199.
3. Barlow KM, Minns RA. The relation between intracranial pressure and outcome in non-accidental head injury. Dev Med Child Neurol 1999; 41:220-225.
4. Kuppermann N, Holmes JF, Dayan PS, Hoyle JD Jr, Atabaki SM, Holubkov R, et al. Identification of children at very low risk of clinically-important brain injuries after head trauma: a prospective cohort study. Lancet. 2009; 374(9696):1160-1170. doi: 10.1016/S0140-6736(09)61558-0. Epub 2009 Sep 14.

* Assistant Professor

** Professor of Pediatric Surgery,
Department of Pediatric Surgery,
Institute of Child Health and Hospital for Children,
Madras Medical College, Chennai.
email: shanmugam.vivek@gmail.com

*** Deputy Director of Medical Education,
Directorate of Medical Education, Chennai.