

TOPIC: A-4.1 MAJOR TRAUMA - PRINCIPLES

OBJECTIVE	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
<p>To be able to assess, resuscitate and stabilise victims of major trauma based on ATLS principles.</p> <p>To identify those that need life or limb saving surgery.</p> <p>To use diagnostic testing appropriately.</p>	<p>To understand the epidemiology of trauma, Importance of mechanisms of injury, trauma scoring and how trauma teams work.</p>	<p><u>Skills</u></p> <p>Take an ambulance service hand over.</p> <p>To be able to recognise need for an carry out life saving procedures.</p> <p>To provide adequate pain relief and splintage.</p> <p>To be skilled in x-ray interpretation and the use of FAST.</p> <p><u>Attitudes</u></p> <p>Optimal working within a team, using ATLS principles and sensitive handling of relatives.</p>	<p>LP</p> <p>LT</p> <p>GT</p> <p>PS</p> <p>LS</p> <p>SL</p> <p>ODA</p>	<p>LP</p> <p>OC</p> <p>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p> <p>ATLS Courses</p>

- understand and apply the principles of Acute Trauma Life Support/Advanced Paediatric Life Support
- be able to examine a child in a way which localises injuries
- be aware of child protection and accident prevention issues

TOPIC: A-4.2 TRAUMA – HEAD INJURY

PROBLEM	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
<p>To be able to assess the head injured patient using history and examination and appropriate investigation.</p>	<p>Knowledge of the anatomy of the scalp, skull and brain.</p> <p>Physiology of cerebral perfusion and intracranial pressure.</p> <p>To be able to stratify head injured patients, identify those who need CT/plain radiology, identify those who need neurosurgical referral.</p> <p>Of the intracranial consequences of a head injury i.e. extradural, subdural, intracerebral haematoma, diffuse axonal injury, post concussion syndrome.</p> <p>Plain radiology/CT appearances.</p> <p>Knowledge of NICE(www.nice.org.uk) and SIGN (www.sign.ac.uk)guidelines.</p>	<p><u>Skills</u></p> <p>To recognise the major head injury and institute an A, B, C, D approach, optimise therapy to avoid secondary brain injury.</p> <p>Identify those patients who will need intubation and ventilation.</p> <p>Appropriate and timely involvement of neurosurgery.</p> <p>Management of scalp lacerations.</p> <p>To be able to safely recognise and treat for minor head injury.</p> <p>Ensure the safe discharge of patients with minor head injury.</p> <p><u>Attitudes</u></p> <p>Optimise joint team working with Critical Care Neurosurgery and the Emergency Department for the seriously head injured patient.</p>	<p>LP</p> <p>LT</p> <p>GT</p> <p>PS</p> <p>LS</p> <p>SL</p> <p>ODA</p>	<p>OC</p> <p>MC</p> <p>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p>

PROBLEM	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
Head injury	<p>Understand the NICE guidelines for head injury in children</p> <p>Understand when to safely discharge children with minor head injury</p> <p>Understand how to recognize signs of physical abuse and how to proceed with local child protection protocols</p>	<p>be able to assess AVPU and Glasgow Coma Score (GCS) in children</p> <p>be able to request appropriate radiology including plain skull x rays and head CT scanning as per national guidelines</p> <p>be able to initiate management of all children with scalp lacerations</p>	<p>LP</p> <p>LT</p> <p>GT</p> <p>PS</p> <p>LS</p> <p>SL</p> <p>ODA</p>	<p>OC</p> <p>MC</p> <p>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p>

TOPIC: A-4.3 CHEST TRAUMA

PROBLEM	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
To be able to recognise and treat those patients who have life-threatening or potentially life-threatening chest injuries.	<p>Knowledge of the anatomy of the intrathoracic organs and surface anatomy of the major thoracic structures.</p> <p>Knowledge of the pathophysiology of cardiothoracic injury.</p> <p>To be able to identify life threatening chest trauma, i.e. tension, pneumothorax, open pneumothorax, flail chest, massive haemothorax, cardiac tamponade.</p> <p>To be able to identify those patients with a potential aortic injury, diaphragmatic rupture, pulmonary contusion, myocardial contusion, oesophageal rupture, tracheal bronchial injury, rib fracture and sternal fracture and to appreciate the plain radiology and CT appearances of these injuries.</p> <p>Understand importance of mechanism of injury eg, penetrating versus blunt trauma</p>	<p>To undertake the ATLS approach.</p> <p>Identify life threatening chest conditions.</p> <p>To be able to undertake a needle thoracentesis, place an intercostal chest drain, pericardiocentesis.</p> <p>Know when to call cardiothoracic surgery.</p> <p>Resuscitative thoracotomy. (adults only)**</p> <p>To provide advice and care for those patients with isolated chest wall injuries who are to be discharged.</p>	<p>LP LT GT PS LS SL ODA</p>	<p>OC MC DOPS CBD AUD ME FFAEM MFAEM</p>
Chest injury	Understand the likely chest injuries through different age groups		<p>LP LT GT PS LS SL ODA</p>	<p>OC MC DOPS CBD AUD ME FFAEM MFAEM</p>

TOPIC: A-4.4 ABDOMINAL TRAUMA

PROBLEM	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
Recognition of those patients who have sustained significant abdominal trauma by thorough history and examination and appropriate investigation.	<p>Knowledge of the structural function and surface markings of the abdominal organs.</p> <p>Knowledge of the different presentation of abdominal trauma and the structures that may be damaged.</p> <p>Specifically blunt splenic, hepatic, renal pancreatic trauma, hollow viscus injury, penetrating abdominal injury, urethral/bladder/testicular trauma.</p> <p>Indications for CT/early surgical involvement.</p>	<p>To be able to assess and reassess the traumatic abdomen, initiate treatment and investigation and involve appropriate specialists.</p> <p>Recognise the influence of injuries elsewhere on abdominal assessment.</p> <p>Be able to undertake a FAST** scan or DPL.* NGT placement</p>	<p>LP LT GT PS LS SL ODA</p>	<p>OC DOPS CBD AUD ME FFAEM MFAEM</p>

TOPIC: A-4.5 SPINAL INJURY

PROBLEM	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
To be able to recognise those patients who have suffered a spinal cord, peripheral nerve or plexus injury by appropriate history, examination and investigation.	<p>Knowledge of anatomy and physiology of spinal cord, myotomes and dermatomes.</p> <p>Recognition of injury to vertebrae (fracture/dislocation), cord (including spinal cord syndromes/sciowora) and ligaments.</p> <p>Methods of appropriate imaging (plain radiology/CT/MRI). (NICE Guidelines www.nice.org.uk)</p> <p>Neurogenic shock/spinal shock – recognition and treatment.</p> <p>To be able to interpret plain radiology of the spine.</p>	<p><u>Skills</u></p> <p>Safe initial care of the potentially spinally injured patient (spine immobilisation).</p> <p>Techniques of spinal immobilisation and log roll</p> <p>Appreciate how spinal cord injury affects assessment.</p> <p>Identify when CT and MRI is appropriate.</p> <p>To record accurately the neurological status of the patient.</p> <p>Liaise with appropriate specialist.</p> <p>To safely ‘clear’ the c-spine.</p> <p><u>Attitudes</u></p> <p>To communicate sensitively and accurately to the patient and their relatives the nature of these injuries.</p>	<p>LP</p> <p>LT</p> <p>GT</p> <p>PS</p> <p>LS</p> <p>SL</p> <p>ODA</p>	<p>OC</p> <p>MC</p> <p>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p>

Spine	Understand the mechanisms and risk of spinal injury in children	<p>be able to manage the anxious immobilised child</p> <p>be able to examine the spine and apply the indications for being able to clinically ‘clear’ the spine</p>	<p>LP</p> <p>LT</p> <p>GT</p> <p>PS</p> <p>LS</p> <p>SL</p> <p>ODA</p>	<p>OC</p> <p>MC</p> <p>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p>
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TOPIC: A-4.6 MAJOR TRAUMA - MAXILLO FACIAL TRAUMA

PROBLEM	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
To identify those patients with maxillo facial trauma, specifically those that may have airway threat. To be able to characterise maxillo facial injuries.	<p>Anatomy and physiology of facial structure</p> <p>Nasal fractures</p> <p>Le Fort fractures</p> <p>Mandibular fractures/dental fractures/ avulsed teeth/orbital fractures.</p> <p>Zygomatic fractures</p> <p>To be able to identify underlying structures at risk from facial lacerations, specifically parotid duct, facial nerve and lacrimal duct.</p> <p>TMJ dislocation</p> <p>Tongue laceration.</p> <p>Soft tissue injury and wounds to the neck.</p>	<p>To be able to recognise a threat to the airway – initiate emergency treatment and call for help.</p> <p>Assess the facio-maxillary bones and associated structures.</p> <p>Identify those patients who will need inpatient or outpatient care.</p> <p>To be able to manage torrential nasopharyngeal bleeding**</p> <p>Avoidance of facial tattooing by thorough cleansing.</p> <p>To ensure a good cosmetic result after facial suturing*</p>	<p>LP</p> <p>LT</p> <p>GT</p> <p>PS</p> <p>LS</p> <p>SL</p> <p>ODA</p>	<p>OC</p> <p>MC</p> <p>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p>

TOPIC: A-4.7 MAJOR TRAUMA - BURNS

PROBLEM	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
<p>To be able to evaluate patients with burns.</p> <p>To be able to commence resuscitation and refer appropriately whilst providing effect analgesia.</p> <p>To manage minor burns.</p>	<p>Know and understand the pathophysiology of burns.</p> <p>To recognise the particular risks to the upper airway from heat and lower airway from inhalation injury.</p> <p>To be able to assess the size and depth of a burn and calculate the fluid loss.</p> <p>To recognise the importance of burns in special areas (i.e. face, joints, perineum).</p> <p>Have knowledge of electrical and chemical burns (e.g. hydrofluoric acid).</p>	<p>To recognise the burns patient who has an airway at risk and the need for early intubation. The A, B, C, D approach.</p> <p>To be able to calculate fluid replacement. To identify those patients who need referral to a specialist centre.</p> <p>To be able to manage minor burns and arrange appropriate follow up.</p> <p>To be able to undertake escharotomy*</p>	<p>LP</p> <p>LT</p> <p>GT</p> <p>PS</p> <p>LS</p> <p>SL</p> <p>ODA</p> <p>ODB</p>	<p>OC</p> <p>MC</p> <p>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p>

Burn	Be able to calculate % burn surface area for children.	be able to recognise possible patterns of child abuse in burn injuries and appropriate referral.	<p>LP</p> <p>LT</p> <p>GT</p> <p>PS</p> <p>LS</p> <p>SL</p> <p>ODA</p> <p>ODB</p>	<p>OC</p> <p>MC</p> <p>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p>
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