

TOPIC: RESUSCITATION

Objectives:

- To be able to use a structured prioritised approach to life threatening situations.
- To be able to undertake resuscitation procedures in a timely and effective manner
- Understand the indications, pharmacology, contra indications of resuscitation drugs
- Lead and supervise the resuscitation team
- Effectively interact with other specialties to ensure optimal care
- To be supportive of relatives and friends of the patient whilst giving clear information
- Exercise good judgement as to when resuscitation is futile or inappropriate

OBJECTIVES:

- be able to formulate a differential diagnosis by age of a patient with acute life threatening respiratory difficulty and prioritise management
- be able to lead a resuscitation team in line with APLS/EPLS/NLS guidelines
- understand the indications, pharmacology, contraindications, dose calculation and routes of administration of drugs used in resuscitation and in the stabilization of children in cardiac arrest or failure
- be able to obtain appropriate peripheral venous and arterial access including intraosseous route
- understand the prognostic factors for outcome of cardiac resuscitation for children
- understand the indications and procedures for transport to a definitive facility following stabilization
- have developed as sensitivity and understanding in the management of chronic end-stage conditions
- understand the appropriate management of Sudden Death in Infancy and the local management guidelines for supporting the family
- understanding the differential diagnosis of the well looking infant presenting with apparent life threatening events (ALTE) e.g. apnoea, cyanosis, floppy baby.

TOPIC: A-1.1 RESUSCITATION – AIRWAY

OBJECTIVE	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
<p>To be able to assess, establish and maintain a patent airway, using both Basic Life Support and Advanced Life Support techniques.</p>	<p>Identification of the obstructed airway and its causes. Methods of maintaining a patent airway - head positioning, jaw thrust, adjuncts, suction. Bag valve mask ventilation/Mapleson circuit. Oxygen delivery systems. Indications for tracheal intubation. Complications of tracheal intubation Understand the appropriate use of pharmacological agents in induction and maintenance of anaesthesia and be aware of their complications and side effects ** Principles of simple ventilators - Knowledge of monitoring techniques (SpO₂, ETCO₂)</p> <p>Failed airway drill, including</p> <ul style="list-style-type: none"> - LMA - Needle and surgical Cricothyroidotomy 	<p><u>Skills</u> Airway assessment Optimising the patient’s position for airway management. Be able to identify the difficult or potentially difficult airway and summon expertise. Airway management with the use of oral/nasal airways. Ventilation using bag valve and mask. Appropriate choice and passage of tracheal tubes using appropriate blades. Use of gum elastic bougie/introducers. Tracheal suction Manage tracheostomy tube complications</p> <p>Identifying correct/incorrect placement of tube (oesophagus, right main bronchus). Perform needle/surgical cricothyroidotomy Percutaneous transtracheal ventilation</p> <p>Interpretation of capnograph trace. Introduction and checking correct placement of laryngeal mask airway. Heimlich manoeuvre</p> <p><u>Attitudes:</u> Know own limitations Appreciate the urgency of providing a patent airway, and the important of basic airway manoeuvres Always know the location of senior Assistance</p>	<p>LP LT GT PS LS SL ODA ODB</p>	<p>OC DOPS CBD AUD ME FFAEM MFAEM</p>

PROBLEM	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
Airway	<p>know the indications and contraindications for a surgical airway</p> <p>understand the prognostic features of the outcome of respiratory arrest</p>	<p>be able to follow age-appropriate algorithms for obstructed airway including choking.</p> <p>be able to discuss end of life decisions in a sympathetic and caring manner with patients and their families</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>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p>

TOPIC: A-1.2 RESUSCITATION – CARDIAC ARREST-PERiarREST

OBJECTIVE	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
To confirm cardiac arrest, establish Basic Life Support, use defibrillation appropriately and use appropriate drugs. To be able to recognise and manage periarrest arrhythmias.	<p>Familiarity with the ALS and APLS algorithms and pharmacology.</p> <p>Knowledge of cardiac arrests in special situations, e.g. hypothermia, trauma, overdose.</p> <p>Knowledge of the outcomes of pre-hospital arrest.</p> <p>Post arrest management.</p> <p>Periarrest arrhythmias and pharmacology of drugs used.</p> <p>Organ Donation</p>	<p><u>Skills</u></p> <p>Perform effective B.L.S. and A.L.S.</p> <p>Rhythm recognition and treatment.</p> <p>Safe defibrillation.</p> <p>To know when to discontinue resuscitation.</p> <p>Central venous access.</p> <p>External pacing</p> <p>Endotracheal drug administration</p> <p><u>Attitudes</u></p>	<p>LP</p> <p>LT</p> <p>GT</p> <p>PS</p> <p>LS</p> <p>SL</p>	<p>OC</p> <p>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p> <p>Life support</p> <p>Course assessments</p>

		<ul style="list-style-type: none"> - Team Work - Compassionate - To act as the patient's advocate when continued critical care input is needed 		
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PROBLEM	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	<u>ASSESSMENT</u>
Cardiac arrest	<p>Understand the causes of cardiac arrest in children.</p> <p>Understand the outcomes of cardiac arrest in children</p>	<p>be able to take decisions in circumstances which present ethical issues and know when to cease resuscitation</p> <p>be able to discuss organ donation in a sensitive manner</p>	<p>LP</p> <p>LT</p> <p>GT</p> <p>PS</p> <p>LS</p> <p>SL</p>	<p>OC</p> <p>DOPS</p> <p>CBD</p> <p>AUD</p> <p>ME</p> <p>FFAEM</p> <p>MFAEM</p> <p>Life support</p> <p>Course assessments</p>

TOPIC: A-1.3 RESUSCITATION – SHOCK

OBJECTIVE	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
<p>To be able to recognise the shocked patient, the likely cause and to initiate treatment.</p>	<p>Know the differential diagnosis of the shocked patient and the distinguishing features of hypovolaemic shock, distributive shock, obstructive shock and cardiogenic shock.</p> <p>Patho-physiology of shock.</p> <p>Role and types of monitoring</p> <p>Appropriate use of inotropes and vaso pressors.</p> <p>The role of imaging, e.g. FAST scanning and echocardiography in the shocked patient.**</p>	<p><u>Skills</u></p> <p>To be able to gain peripheral and central venous access in the shocked patient.* (ultrasound guided). Central access including: Subclavian/internal jugular/femoral and CVP measurements</p> <p>Arterial line insertion</p> <p>Judicious use of fluids especially in the elderly and the trauma patient.</p> <p>Intra-osseous and cut down techniques.</p> <p>Accessing indwelling vascular lines</p> <p>Recognition for the need for urgent surgical intervention.</p> <p><u>Attitudes</u></p> <p>Ensure optimal team working to establish the diagnosis and commence treatment. This will require close liaison with in-patient teams and radiology.</p>	<p>LP LT GT PS LS SL ODA ODB</p>	<p>OC DOPS CBD AUD ME FFAEM MFAEM</p>

TOPIC: A-1.4 RESUSCITATION – COMA

OBJECTIVE	KNOWLEDGE	SKILLS/ATTITUDES	LEARNING	ASSESSMENT
To be able to look after the comatose patient safely and establish the diagnosis and differential diagnosis by systematic history and examination and appropriate diagnostic testing.	Understand the differential diagnosis of the comatose patient and be able to undertake investigation (routine blood tests/arterial blood gas/radiology) and commence treatment.	<u>Skills</u> Apply the A, B, C, D approach to manage and stabilize the patient. Protection of the comatose patient including log rolling and urinary catheterisation. <u>Attitudes</u> - Respect - Compassion	LP LT GT PS LS SL ODA ODB	OC DOPS CBD AUD ME FFAEM MFAEM