

ANESTHESIOLOGY

Objectives:

At the end of the course, the learners shall be able to:

1. Have familiarity with different types of anaesthesia, drugs, indications, administration, side effects & contraindications.
2. To perform Cardiopulmonary resuscitation (Adult and pediatric)
3. Set up I.V infusion and Peripheral cannulation (Adult and pediatric)
4. Airway Management in the unconscious patient
5. To perform endotracheal intubation(Adult and pediatric)
6. Administer O2 in the hospital and domestic setup
7. To perform simple nerve blocks

Knowledge

Subject	Must know	Desirable to know
Anatomy of upper airway - Normal & Abnormal (Endotracheal Intubation)	✓	
Physiology of Respiration - O ₂ & CO ₂ transport (Oxygen therapy)	✓	
Premedication	✓	
Pre-operative evaluation	✓	
Muscle relaxants		✓
Stages of Anesthesia and general anesthetic agents		✓
Administration of GA, Balanced anesthesia and IPPV		✓
Regional anesthetics: Infiltration, Digital, Ankle block, Peripheral nerve block	✓	
Spinal Anesthesia and Epidural Anesthesia		✓
Monitoring the post operative patient	✓	
Post operative complications and recovery room	✓	
CPCR and use of simple ventilators		✓
ICU, Role of Anesthesia		✓
Shock	✓	
Blood transfusion, fluid and electrolyte balance (basics)	✓	
Management of unconscious patient including airway	✓	
Basic principles of management of poisoning	✓	
Acute pain relief	✓	
Chronic pain relief & palliative care principles	✓	
Patient as a person	✓	
Autonomy of decision - Do not resuscitate + Organ harvesting	✓	
Prolongation of life	✓	
Euthanasia	✓	
Cancer & terminal care	✓	
Consent for surgery & anesthesia	✓	

Examination skills

Skills	Perform independently	Perform under supervision	Assist the expert	Observe
Head and neck positioning	✓			
Bag-and-mask using self-inflating bag	✓			
Selection & use of oxygen delivery devices	✓			
Recognition & management of respiratory obstruction	✓			
Insertion of oral airway	✓			
Insertion of nasopharyngeal airway		✓		
Suctioning	✓			
Use of laryngoscope	✓			
Use of orotracheal tube	✓			
ETT Suctioning	✓			
Peripheral venous cannulation	✓			
Local anaesthetic infiltration (for cannulation)	✓			
Setting up an intravenous infusion	✓			
Preparing & giving intravenous medicines		✓		
Recognize common complication		✓		
Use of defibrillator			✓	
Surface anesthesia	✓			
Digital block	✓			
Infiltration Anesthesia	✓			
Interpretation of ABG, CVP, Pulse oximeter and Capnograph		✓		
Consent for procedures	✓			
Motivation for blood and organ donation			✓	
Interpersonal relationship	✓			
History taking & Preanesthetic evaluation			✓	
Documentation and maintenance of records	✓			
Medical Team/Mass Casualty Management			✓	
Hemorrhage & Shock			✓	
Anaphylaxis			✓	
Status asthmatics			✓	
First aid	✓			

Skills to be learnt initially on the models and later on performed under supervision before performing independently, provision of **skills laboratories** in the Medical Colleges will facilitate this process

Record of Training and Assessment

- Timetable of attendance, logbook of topics & skills teaching
- Feedback from trainers
- Formal end of module presentation
- Appraisal of module by student

Assessment

Formative at the end of capsule course and clinical postings

Summative at the end of the Course

Tools:

Theory

Problem solving MCQs,

Structured Long questions

Problem solving long questions

Short answer questions

Practical

Long case

Short cases

OSCE

Summative examination to be included along with Surgery

Teaching learning methods:

Structured interactive sessions

Small group discussions

Self-learning tools like

- (a) Assignments
- (b) Problem based learning
- (c) Written case scenarios
- (d) Simulated patient management problems
- (e) Tutorials, workshops
- (f) One to one teaching in theatre
- (g) Attendance at Departmental Morbidity, Audit and Journal Club Meeting

Learning resource materials

Textbooks

Internet

CDs

Videos

Skill laboratories