

UBC Emergency Medicine Clerkship Objectives

A. CLINICAL SKILLS

Rapidly obtain pertinent information about the patient (perform an “Emergency-directed” history), perform an appropriate and accurate physical exam, and formulate a differential diagnosis based on sometimes limited information available at the time of presentation.

Recognize an acutely ill/injured patient and have a systematic prioritized approach to the assessment and simultaneous stabilization/treatment.

Formulate a plan of investigation and treatment of urgent and non-urgent problems.

B. KNOWLEDGE

1. RESUSCITATION

BLS/ACLS

Describe adult and infant CPR.

Describe the approach to a patient who is choking.

Identify the following cardiac dysrhythmias:

asystole,

bradycardia,

first, second, and third degree heart block,

ventricular tachycardia,

ventricular fibrillation,

supraventricular tachycardia.

State the treatment for the above dysrhythmias.

Shock

Classify shock.

Outline the pathophysiology, clinical features and management of anaphylactic shock.

Outline the initial management of hypovolemic shock.

2. TRAUMA

Priorities

State the priorities in the initial management of the multiple trauma patient.

Give the indications for blood transfusions in the multiple trauma patient.

Airway

List five indications for intubation.

Describe the physical findings of a patient with an obstructed airway.

Describe the methods of opening the airway.

Discuss the various options available in airway management. **Spinal trauma**

Using an X-ray study, demonstrate the normal anatomy of the cervical spine (C-spine)

Describe an acceptable approach to the interpretation of a C-spine X-ray.

Head trauma

State the initial management in the patient who has increased intracranial pressure secondary to an intracranial hematoma.

Describe the physical findings in a patient who is herniating the uncal portion of the temporal lobe secondary to an intracranial mass lesion.

Chest trauma

List the six life-threatening chest injuries in the trauma patient.

Briefly outline the physical findings and treatment of each of the above.

Abdominal trauma

List the most common intraabdominal injuries following blunt abdominal trauma.

List four different diagnostic tests in the investigation of intraabdominal injuries.

Urogenital trauma

Describe the physical findings in a patient who has a urethral injury.

Extremity trauma

List the limb-threatening injuries of the extremity.

3. TOXICOLOGY

Approach to the poisoned patient

Discuss the initial assessment and management of the poisoned patient.

Discuss the role of a regional Poison Control Centre.

Discuss the utility of a "drug screen".

Decontamination procedures

List the indications and contraindications for the use of charcoal.

List the indications and contraindications for gastric lavage.

Specific poison management

List 10 poisonings for which a specific antidote is available (and name the antidote).

Briefly discuss the management of acute salicylate overdose.

Briefly discuss the management of acute acetaminophen overdose.

Withdrawal

List the stages of alcohol withdrawal.

List the clinical features of alcohol withdrawal.

4. ENVIRONMENTAL

Burns

Classify burns.

State the management of first- and second- degree burns.

Determine the initial fluid replacement therapy in a patient with a significant burn.

Temperature extremes

Give the definition of hypothermia.

Differentiate between heat stroke and heat exhaustion.

Bites and stings

Describe the initial management of a human, a dog, and a cat bite to the hand.

Describe the management of a hymenoptera sting (wasp or bee).

Tetanus/rabies

Provide a tetanus immunization schedule for variously immunized patients.

Give the indications for rabies prophylaxis.

5. EMERGENCY MEDICAL SERVICES

Differentiate between the responsibilities of an EMA level I, II, and III provider as defined by the Canadian Medical Association

6. PAEDIATRIC EMERGENCIES

List the clinical and social features that are suggestive of non-accidental trauma.

List the common causes of meningitis in the following age groups:

neonates

2-24 months

>24 months.

List the common therapeutic agents for the treatment of meningitis in the above three age groups.

State an acceptable approach to the patient with epiglottitis.

Differentiate between epiglottitis and laryngotracheobronchitis (croup).

List the features associated with a febrile seizure.

State the initial management of a child who presents with a seizure.

Describe the reporting requirements for suspected or proven cases of non-accidental trauma.

List the symptoms and signs of dehydration.

7. ACUTE DISORDERS BY BODY SYSTEM

Central nervous system

Classify the causes of coma.

State the initial management of the unconscious patient.

Outline the important features in history and physical examination in a patient with headache.

Cardiovascular system

Describe a system for the interpretation of the ECG.

List the differential diagnosis of pleuritic chest pain, and describe how to differentiate these.

List the differential diagnosis of central chest pain, and describe how to differentiate these.

Define unstable angina.

Outline the initial management of the patient with an acute uncomplicated myocardial infarction.

List the indications and contraindications for the use of thrombolytic therapy.

List the signs and symptoms of acute pulmonary edema.

State the principles of management of hypertensive emergencies.
Describe the clinical features of an acute dissecting thoracic aortic aneurysm, and the principles of management of this condition.
Classify the causes of syncope.

Respiratory system

Discuss the approach to the patient with respiratory distress.
Distinguish between mild and severe asthma using history, physical examination, and laboratory features.
State the acute management of asthma.
Discuss the indications for admission of an asthmatic patient.
List the predisposing factors for pulmonary embolus.
Discuss the investigations available for pulmonary embolus.
List the clinical features of deep vein thrombosis.

Genital/urinary tract

State the acute management of sexually transmitted diseases in males and females.
Discuss the approach to the patient with vaginal bleeding.
Discuss the management of a patient with an ectopic pregnancy.
Differentiate between testicular torsion and epididymitis.
State the initial investigations and management of renal colic.

Gastrointestinal system

Discuss the approach to the patient with acute abdominal pain.
Describe how to differentiate the (immediately) life-threatening causes of abdominal pain.
State the initial management of a GI bleed.
State the initial management of acute intestinal obstruction. State the initial management of pancreatitis.

Eyes, ears, nose and throat

Discuss the approach to the patient with a red eye.
List the causes of painless loss of vision.
Describe the clinical features of acute angle closure glaucoma.
Classify epistaxis.
Discuss the approach to the patient with epistaxis.
Discuss the approach to the patient with vertigo.

Musculoskeletal system

Using a radiograph, describe a fracture using standard orthopedic terminology including the following: bone name, bone location, fracture type, comminution, angulation, displacement, impaction, and articular surface involvement.
Using a radiograph of a fracture of the epiphyseal area, classify a fracture according to the Salter-Harris classification.
Discuss the management of a septic joint.
Describe the principles of wound management.

Metabolic abnormalities

Using an arterial blood gas result, determine the acid-base disturbance.

List the common causes for metabolic acidosis, metabolic alkalosis, respiratory acidosis, and respiratory alkalosis.

Describe the approach to the hyponatremic patient.

Behavioural

List and discuss the treatment options for the management of the violent patient.

List the risk factors for suicide.

Differentiate between organic and functional causes of psychosis using the history, physical examination, and mental status examination.

Discuss the prevalence of domestic violence, and the approach to the patient in whom domestic violence is suspected or has occurred.

C. PROCEDURAL SKILLS

Airway

Demonstrate the Heimlich maneuver.

Demonstrate the head tilt, chin lift, and jaw thrust maneuvers for maintaining a patent airway.

Demonstrate the insertion of an oral and nasal airway.

Demonstrate the technique of bag-valve-mask ventilation.

Assemble the necessary equipment for the management of an airway problem.

Demonstrate the proper technique for intubating the nontraumatized adult patient.

CPR/ACLS

Demonstrate the proper technique for one-person CPR

Demonstrate the proper technique to perform cardioversion and defibrillation.

Vascular access

Demonstrate the proper technique for venipuncture.

Demonstrate the proper technique for obtaining arterial blood for blood gas testing.

Demonstrate the proper technique for inserting a peripheral intravenous line.

Demonstrate the proper technique for inserting a femoral central line.

Stabilization and immobilization

Demonstrate the proper immobilization techniques in a patient with suspected spine injury.

Wound management

Demonstrate the proper aseptic technique for performing procedures.

Demonstrate the proper technique for a digital nerve block.

Demonstrate the proper technique for infiltration of local anaesthesia.

Classify local anaesthetics.

Discuss the potential adverse effects of local anaesthetics.

Discuss the selection of proper suture materials.

Demonstrate the following suturing techniques: simple interrupted, subcutaneous, vertical mattress, continuous (running).

Demonstrate the proper technique for managing a superficial abscess.

Casting and splinting techniques

Demonstrate the application of the following: tensor bandage, sling, ulnar gutter splint, finger splints.

Demonstrate the application of the following casts: short arm, scaphoid, below knee (weight-bearing and non weight-bearing).

Eye, ear, nose and throat procedures

Demonstrate the proper technique for using the slit lamp.

Demonstrate the proper technique for removal of a foreign body from the following locations:

cornea

nose and

ear

Demonstrate the proper technique for using the Schiötz tonometer.

Describe the proper technique for chemical cautery of a bleeding site on the nasal septum.

Describe the proper technique for inserting an anterior nasal pack.

Discuss the investigation and treatment options for a foreign body in the throat.

Other procedures

Demonstrate the proper technique for the insertion of a foley catheter in an adult.

Demonstrate the proper technique for the insertion of a gastric lavage tube.

Describe the proper technique for the aspiration of the following joints: knee and elbow.

Describe the proper technique for performing a lumbar puncture.

Describe the proper technique for performing a needle thoracostomy.

Describe the proper technique for performing a tube thoracostomy.

D. ATTITUDINAL SKILLS

Demonstrate an ability to communicate effectively with patients and their families, and show a compassionate interest in the patient as a person.

Demonstrate a capacity to work quickly, efficiently, and have the ability to vary the pattern of the clinical assessment according to the significance and urgency of the patient's problem.

Demonstrate an ability to establish and maintain effective working relationships with colleagues and other health care professionals.

Demonstrate an awareness of the limitation of one's capabilities and an ability to function adequately within the limits of competence.

Demonstrate a sense of reliability and responsibility as defined by one's professional responsibilities.

Demonstrate an understanding of the principles of (1) informed consent, (2) right of competent patients to refuse treatment and (3) implied consent.