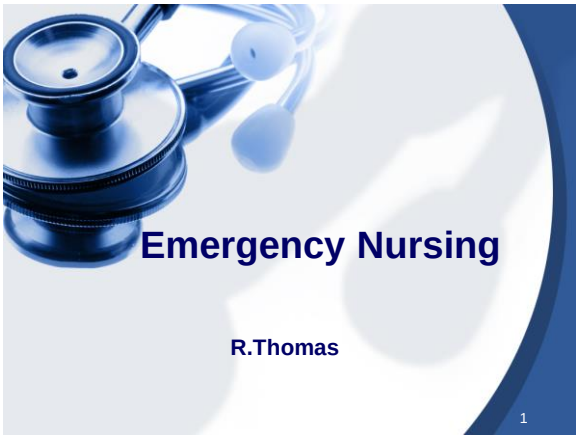


Emergency Nursing

R.Thomas

1

Triage

- the process of assessing patients to determine management priorities
- Hierarchy based on severity
  - Emergent
  - Urgent
  - Nonurgent
- ED triages differs from disaster triage in that patients who are the most critically ill receive the most resources, regardless of potential outcome

2

Primary Survey

- A: airway
- B: breathing
- C: circulation
- D: disability
- E: exposure

3

Secondary Survey

- Health history
- Head-to-toe assessment
- Diagnostic and lab testing
- Monitoring devices
- Splinting
- Wound care
- Other interventions

4

Priority Emergency Measures

- Airway obstruction and establishing an airway and ventilation
- Hemorrhage
- Hypovolemic shock
- Wounds
- Trauma and multiple trauma

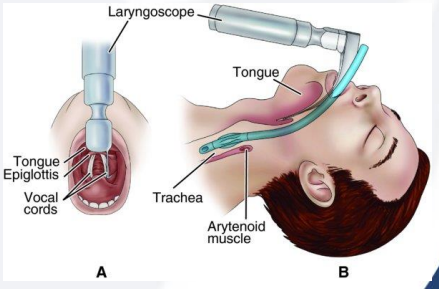
5

Airway and Ventilation

- Partial and complete obstruction
- Oropharyngeal or nasopharyngeal airway insertion
- Endotracheal intubation
- King tube or laryngeal mask
- Cricothyroidotomy
- Ventilation

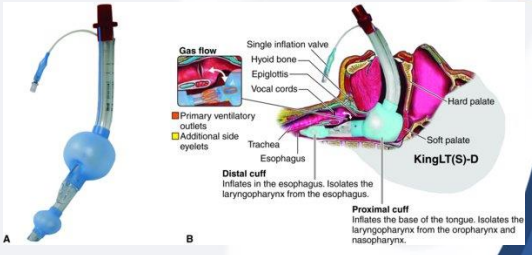
6

Endotracheal Intubation



7

King Tube



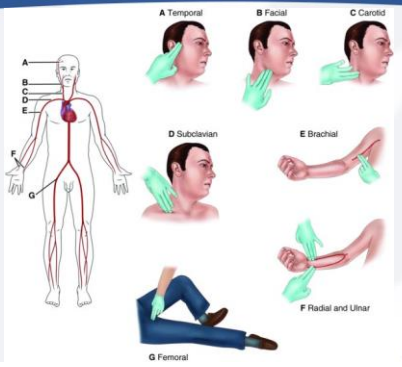
8

Hemorrhage

- Assessment changes
- Fluid replacement
- Control of bleeding: external and internal

9

Pressure Points for Hemorrhage Control



10

Wounds

- Cleaning
- Primary closure
- Delayed primary closure

11

Trauma

- Collection of forensic evidence
- Injury prevention

12

Priorities of Care for the Patient With Multiple Trauma

- Requires a team approach
- Determine extent of injuries and establish priorities of treatment
- Assume cervical spine injury
- Injuries interfering with vital physiologic function have highest priority

13

Management of the Patient With Intra-Abdominal Injuries

- Blunt trauma or penetrating injuries
- Abdominal trauma can cause massive life-threatening blood loss into abdominal cavity
- Assessment
  - Obtain history
  - Abdominal assessment and assess other body systems for injuries that frequently accompany abdominal injuries
  - Assess for referred pain which may indicate spleen, liver, or intraperitoneal injury
  - Laboratory studies, CT scan, abdominal ultrasound (FAST), diagnostic peritoneal lavage
  - Stab wound: sinography

14

Management of the Patient With Intra-Abdominal Injuries (cont'd)

- Ensure airway, breathing, and circulation
- Immobilize cervical spine
- Continually monitor the patient
- Document all wounds
- If viscera are protruding, cover with sterile, moist saline dressing
- Hold oral fluids
- NG to aspirate stomach contents
- Tetanus and antibiotic prophylaxis
- Rapid transport to surgery if indicated

15

Complications of Crush Injuries

- Hypovolemic shock
- Paralysis of body part
- Erythema and blistering
- Damage to body part
- Renal dysfunction

16

Environmental Emergencies: Heat Stroke

- A failure of heat-regulating mechanisms
- Types
  - Exertional: occurs in healthy individuals during exertion in extreme heat and humidity
  - Hyperthermia: the result of inadequate heat loss
- Older adults, very young people, ill or debilitated people, and persons taking some medications are at high risk
- Can cause death
- Manifestations: CNS dysfunction, elevated temperature, hot dry skin, anhydrosis, tachypnea, hypotension, and tachycardia

17

Management of the Patient With Heat Stroke

- Use ABCs and reduce temperature to 39°C as quickly as possible
- Cooling methods
  - Cool sheets, towels, or sponging with cool water
  - Ice to neck, groin, chest, and axillae
  - Cooling blankets
  - Iced lavage of the stomach or colon
  - Immersion in cold water bath
- Monitor temperature, VS, ECG, CVP, LOC, urine output
- IVs to replace fluid losses

  Note: hyperthermia may recur in 3 to 4 hours; avoid hypothermia

18

Environmental Emergencies: Frostbite

- Trauma from freezing temperature and actual freezing of fluid in the intracellular and intercellular spaces
- Manifestations: hard, cold, and insensitive to touch, may appear white or mottled, may turn red and painful as rewarmed
- The extent of injury is not always initially known.
- Controlled but rapid rewarming; 37° to 40°C circulating bath for 30- to 40-minute intervals
- Analgesics for pain
- Do not massage or handle; if feet are involved, do not walk

19

Environmental Emergencies: Hypothermia

- Internal core temperature is 35°C or less
- Older adults, infants, persons with concurrent illness, homeless people, and trauma victims are at risk
- Alcohol ingestion increases susceptibility
- Hypothermia may be seen with frostbite, and treatment of hypothermia takes precedence
- Physiologic changes in all organ systems
- Monitor continuously

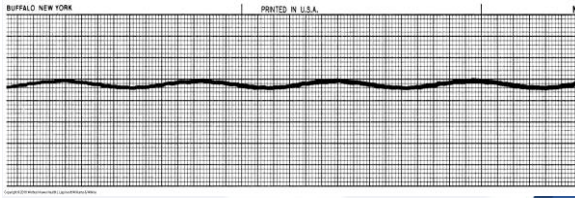
20

Management of the Patient With Hypothermia

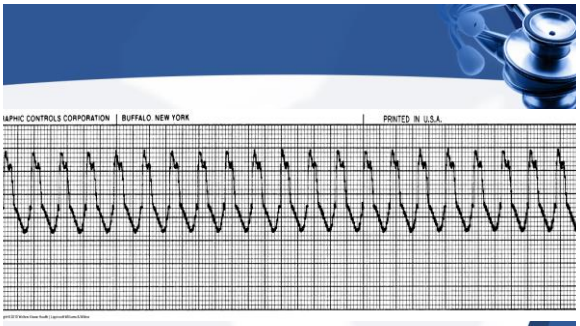
- Use ABCs, remove wet clothing, and rewarm
- Rewarming
  - Active core rewarming
    - Cardiopulmonary bypass, warm fluid administration, warm humidified oxygen, warm peritoneal lavage
  - Passive external rewarming
    - Warm blankets and over the bed heaters

Note: Cold blood returning from the extremities has high levels of lactic acid and can cause potential cardiac dysrhythmias and electrolyte disturbances.

21



22



23

Management of the Patient With Poisoning

- Poison is any substance that when ingested, inhaled, absorbed, applied to the skin, or produced within the body in relativity small amounts injures the body by its chemical action.
- Treatment goals
  - Remove or inactivate the poison before it is absorbed
  - Provide supportive care in maintaining vital organs systems
  - Administer specific antidotes
  - Implement treatment to hasten the elimination of the poison

24

Management of the Patient With Ingested Poisons—Assessment

- ABCs
- Monitor VS, LOC, ECG, UO
- Laboratory specimens
- Determine what, when, and how much substance was ingested
- Signs and symptoms of poisoning and tissue damage
- Health history
- Age and weight

25

Management of the Patient With Ingested Poisons

- Measures to remove the toxin or decrease its absorption
  - Use of emetics
  - Gastric lavage
  - Activated charcoal
  - Cathartic when appropriate
  - Administration of specific antagonist as early as possible
  - Other measures may include diuresis, dialysis or hemoperfusion
- Corrosive agents such as acids and alkalines cause destruction of tissues by contact. Do not induce vomiting with corrosive agents.

26

Management the Patient With Carbon Monoxide Poisoning

- Inhaled carbon monoxide binds to hemoglobin as carboxyhemoglobin. Carboxyhemoglobin does not transport oxygen.
- Manifestations: CNS symptoms predominate
  - Skin color is not a reliable sign, and pulse oximetry is not valid
- Treatment
  - Get to fresh air immediately
  - CPR as necessary
  - Administer oxygen; 100% or oxygen under hyperbaric pressure
- Monitor continuously

27

Management of the Patient With Chemical Burns

- Severity of the injury depends on the mechanism of action of the substance, the penetrating strength and concentration, and the amount of skin exposed to the agent.
- Immediately flush the skin with running water from a shower, hose, or faucet.

  Note: Lye or white phosphorus should be brushed off the skin dry.
- Protect health care personnel from the substance.
- Determine the substance.
- Some substances may require prolonged flushing or irrigation.
- Follow-up care includes reexamination of the area at 24 hours, 72 hours, and 7 days.

28

Management of the Patients With Food Poisoning

- A sudden illness caused by the ingestion of contaminated food or drink
- ABCs and supportive measures

  Note: Food poisoning, such as botulism or fish poisoning, may result in respiratory paralysis and death.
- Determination of food poisoning
- Treat fluid and electrolyte imbalances
- Control nausea and vomiting
- Clear liquid diet and progression of diet after nausea and vomiting subside

29

Management of the Patient With Substance Abuse

- Acute alcohol intoxication: a multisystem toxin
  - Alcohol poisoning may result in death
  - Maintain airway and observe for CNS depression and hypotension
  - Rule out other potential causes of the behaviors before it is assumed the patient is intoxicated
  - Use a nonjudgmental, calm manner
  - May need sedation if noisy or belligerent
  - Examine for withdrawal delirium, injuries, and evidence of other disorders

30

Psychiatric Emergencies

- Overactive patients, violent behavior, underactive, or depressed patients and suicidal patients
- Management
  - Maintain the safety all persons and gain control of the situation
  - Determine if the patient is at risk for injuring him- or herself or others
  - Maintain the person's self-esteem while providing care
  - Determine if the person has a psychiatric history or is currently under care to contact that therapist
- Crisis intervention
- Interventions specific to each of the conditions

31

Crisis Intervention: Violence, Abuse, and Neglect

- How the patient is received and treated in the ED is important to his or her psychological well-being.
- Crisis intervention begins as soon as the patient enters the facility; the patient should be seen immediately.
- Goals are to provide support, reduce emotional trauma, and gather evidence for possible legal proceedings.
- Patient reaction: rape trauma syndrome
- History taking and documentation
- Physical examination and collection of forensic evidence
- Role of the sexual assault nurse examiner (SANE)

32