

Care of the Emergency Patient

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Initial Disclaimer

- Past, present, and anticipated experiences affect patient management, so patients must be assessed and treated in a developmental and psychosocial context with emphasis on physiologic principles and institutional preferences.

Scope and Practice of Emergency Nursing

- Emergent, urgent, and critical care needs
- An emergency is whatever the patient or family considers it to be
- The emergency nurse has special training, education, experience, and expertise in assessing and identifying health care problems in crisis situations

Emergency Nursing

- Patients with life-threatening or potentially life-threatening problems enter the hospital through the emergency department (ED)
- Triage
 - Process of rapidly determining patient acuity
 - Represents a critical assessment skill

Emergency Nursing

- Triage process
 - Patients who have a threat to life, vision, or limb are treated before other patients
- Triage system: Categorizes patients so most critical are treated first

Initial Assessment

- A systematic process
- Divided into two phases
 - Primary assessment
 - Secondary assessment
- Must follow safety guidelines for protection of patient and staff
- Pediatric assessment triangle

Emergency Nursing

- **Primary survey focuses (ABCDEFGG)**
- Airway with cervical spine stabilization and/or immobilization
- Breathing
- Circulation
- Disability
- Exposure and Environmental control
- Facilitate adjuncts and Family
- Get Resuscitation Adjuncts

Secondary Survey

- **Definition: Brief, systematic process to identify all injuries**
- History and Head-to-toe assessment
- Inspect the posterior surfaces
- Evaluate need for tetanus prophylaxis
- Provide ongoing monitoring
- Prepare to----

Death in the Emergency Department

- Must recognize importance of hospital rituals in preparing the bereaved to grieve
- Determine if patient could be candidate for non-heart beating donation
- Medical examiner

Gerontologic Considerations: Emergency Care

- Elderly are at high risk for injury—
 - Decreased visual acuity and peripheral vision
 - Hearing loss
 - Especially to high frequency sounds
 - Pre-existing disease and medication use
 - Dementia and cognitive impairment

Heat Exhaustion

- Prolonged exposure to heat
- Occurs when the body is unable to cool itself
- Symptoms may be vague
- Fatigue, nausea, vomiting, extreme thirst
- Treatment.....

Heat Stroke

- Failure of the hypothalamic thermoregulatory processes
- Sweat glands stop functioning and core temperature increases ($>105^{\circ}\text{ F}$ [41° C])
- Death from heatstroke is directly related to the amount of time the patient's body temperature remains elevated

Heat Stroke

- Shivering: Increases core temperature, complicates cooling efforts, treated with IV chlorpromazine
- Aggressive temperature reduction until core temperature reaches 102° F (38.9° C)
- Monitor for signs of rhabdomyolysis, myoglobinuria, and disseminated intravascular coagulation

Frostbite Injury

- Damage to the skin from freezing
- Superficial frostbite
- Treatment



(Courtesy Cameron Bangs, MD. From Auerbach PS, Donner HJ, Weiss EA: *Field guide to wilderness medicine*, ed, 2, St. Louis, 2003, Mosby.)

Frostbite Injury

- Injured tissue is friable
- Rewarming requires medical control
- Thawing frozen tissue is extremely painful
- Deep frostbite



(Courtesy Cameron Bangs, MD. From Auerbach PS, Donner HJ, Weiss EA. Field guide to wilderness medicine, ed, 2, St. Louis, 2003, Mosby.)

Hypothermia

- Mild hypothermia (93.2° to 96.8° F [34° to 36° C])
 - Core temperature <95° F (<35° C)
- Moderate hypothermia (86° to 93.2° F [30° to 34° C])
 - Core temperature <86° F (30° C) is potentially life-threatening
- Severe hypothermia (<86° F [30° C])
 - Coma results when core temperature is <82.4° F (28° C)
- Death usually occurs when core temperature is <78° F (25.6° C)

Hypothermia

- Treatment of hypothermia
- Mild hypothermia: Passive or active external rewarming
- Moderate to Severe hypothermia: Active core rewarming
- Rewarming should be discontinued once the core temperature reaches 95° F (35° C)
- Warm patient to at least 90° F (32.2° C) before pronouncing dead

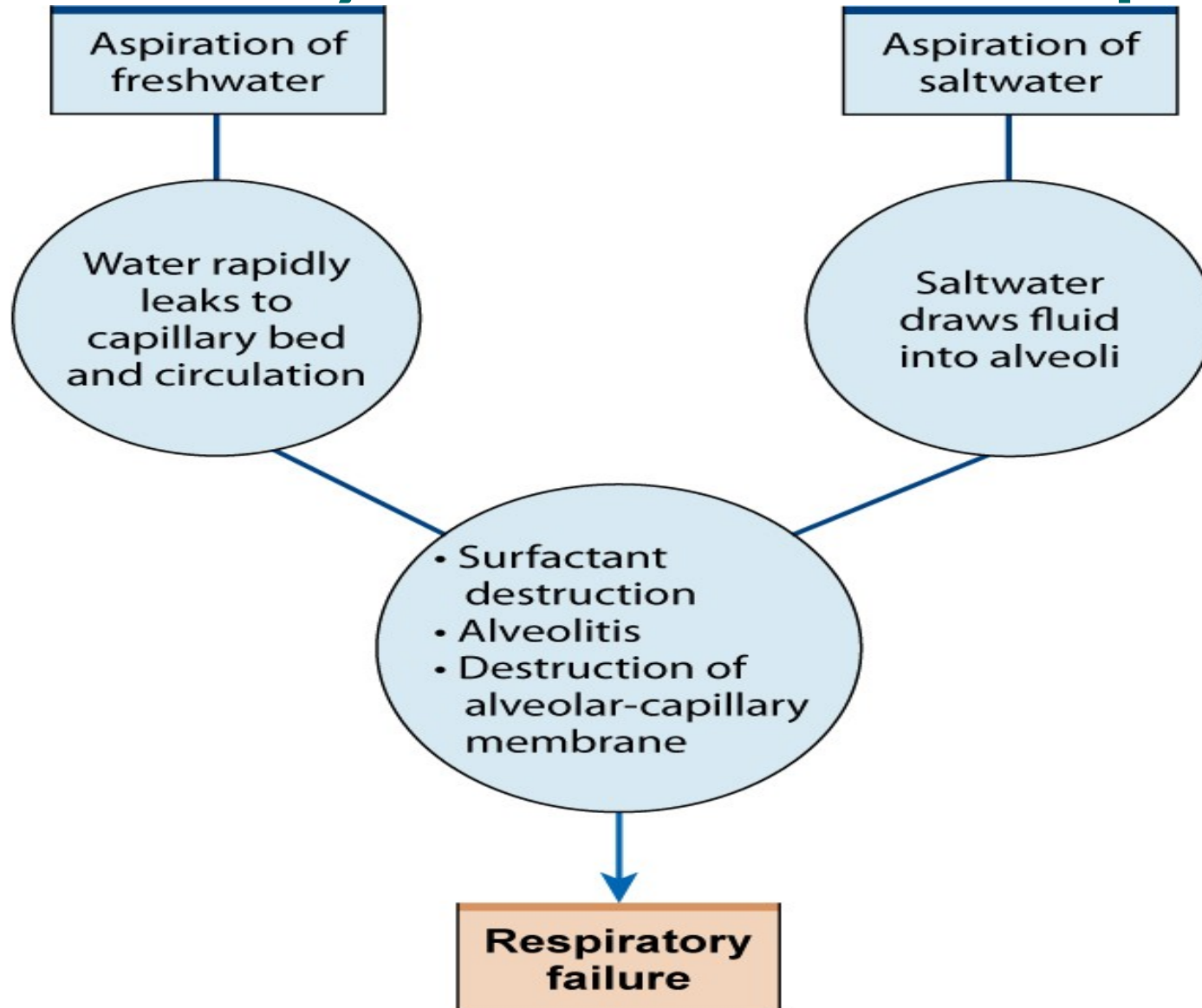
Submersion Injury

- Person becomes hypoxic due to submersion in water
- Drowning: Death from suffocation after submersion in water
 - Immersion syndrome occurs with immersion in cold water, which leads to stimulation of the vagus nerve and potentially fatal dysrhythmias
 - Near-drowning: Survival from potential drowning

Submersion Injury

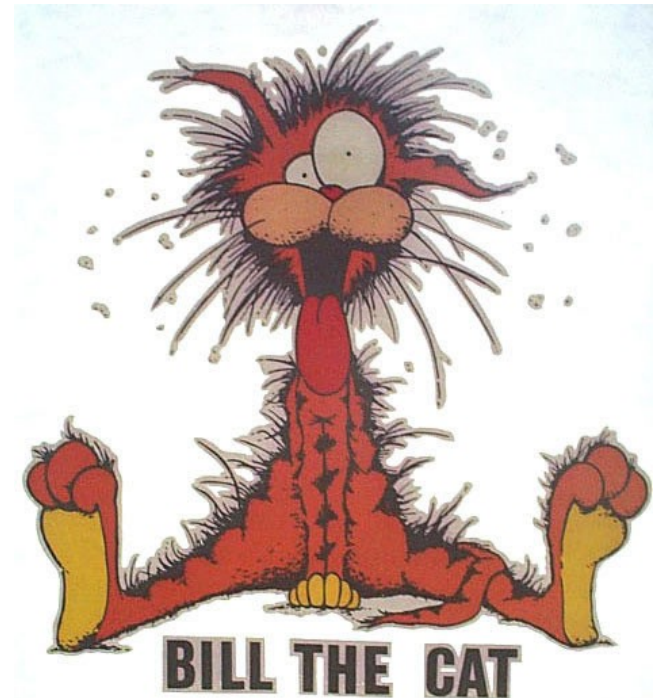
- Treatment of submersion injuries
- Initial evaluation: ABCD
- Mechanical ventilation
- Observe for minimum of 4 to 6 hours
- Delayed pulmonary edema (secondary drowning): Delayed death from drowning due to pulmonary complications

Pulmonary Effects of Water Aspiration



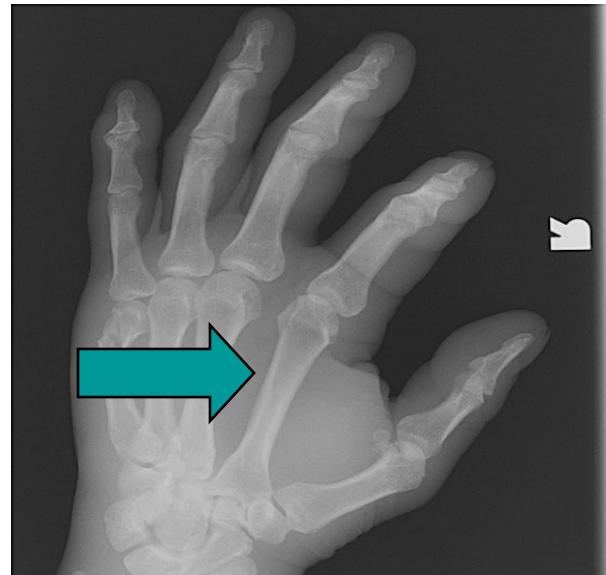
Animal Bites

- Children at greatest risk
- Most common
 - Dog and Cats
- Complications



Human Bites

- Result in puncture wounds or lacerations
- Boxer's fracture associated with an open wound from knuckles striking teeth
- Treatment



Spider Bites

- Black Widow
 - neurotoxic
- Brown Recluse
 - cytotoxic



Snakebites

- Crotalidae or Pit viper
 - Venom is hemolytic
- Elapidae
 - Venom is neurotoxic
- Local reaction
- Systemic reaction



Carbon Monoxide Poisoning

- Inhaled carbon monoxide binds to hemoglobin as carboxyhemoglobin, which does not transport oxygen
- Manifestations
 - Skin color is not a reliable sign and pulse oximetry is not valid
- Treatment

Eye Injury

- **Thermal and Chemical burns**
- **Abrasions**
- **Intraocular foreign bodies**

Questions?
Discussion
time