**Bleeding and Shock** **Chapter 15 4.2**

***Blood***

* Blood is the only tissue that flows throughout the body
* Carries \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & nutrients to all parts of the body
* Transports waste products back to the lungs, kidneys, and liver for disposal
* Essential part of\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ system
* Crucial for fluid and temp balance
* Hydraulic fluid for certain functions
* Highway for hormonal messages

***Bleeding***

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Bleeding
* Issues bright red blood that spurts or pulses corresponding to heart beat
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Bleeding
* Slower, less severe non-pulsing bleeding
* Closer to surface, therefore easier to control
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Bleeding
* Slow & oozing blood
* Blood clots rapidly
* Greater risk of infection

***Arterial Bleeding***

Treatment:

* Treat athlete for shock
* Apply direct pressure; find and use pressure points
* Activate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Apply tourniquet if bleeding cannot be controlled by direct pressure or use of pressure points
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Punctured/severed artery
* Bright \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Distinct spurts/pulses correspond to heart beat
* Can lose large volume of blood in short period

***Venous Bleeding***

Treatment:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Compression bandaging
* Follow-up with doctor
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of 1+ veins
* Less severe than arterial
* Steady blood flow
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Easier to control

**SHOCK**

* Precursor to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Occurs when the circulation system fails to send blood to all body parts
* Prompt recognition, treatment, & control are crucial for survival
* Characterized by:
  + Drop in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Reduced blood circulation
  + Inadequate blood flow to tissues

***Capillary Bleeding***

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Typically oozes
* Blood clots quickly
* Risk of infection higher than

with arterial or venous

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Minor cuts
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Bleeding and Shock: Part 2 Notes 4.3***

***Hemorrhagic Shock***

***Respiratory Shock***

* Lungs unable to supply enough oxygen to blood
* Causes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and elevated respiratory rate
* Caused by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, illness, or pulmonary contusion (bruising of lungs)
* Loss of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from an injury
* Blood pressure falls and adequate

oxygen is unavailable to body

* Injury \_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Cause by severe blunt trauma or internal

injuries (i.e. ruptured spleen)

***Cardiogenic Shock***

* Caused by inadequate functioning of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Heart sustains damage through disease, infection, or injury
* Extremely rare in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Athletes with previously undiagnosed heart defects or conditions

***Neurogenic Shock***

* Loss of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ control by the nervous

system

* Disruption of autonomic nervous system

control over\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Veins & arteries immediately dilate, expands

volume of circulatory system, reducing blood pressure

***Anaphylactic Shock***

***Metabolic Shock***

* Occurs with severe loss of body \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Severe diarrhea, vomiting, or some disease
* Severe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Caused by severe *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

(exaggerated response by body’s immune system

to what would otherwise be a harmless substance)

* Reactions vary—itchy eyes and runny nose, to

life-threatening response

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, medications,

***Septic Shock***

* Life-threatening reaction to severe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Body tissues and organs not get enough blood and oxygen
* Vital organs may not function properly or fail completely
* Medical emergency
* Hospital care
* Signs:
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Elevated breathing
  + Elevated heart rate
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

certain food and food additives

***Psychogenic Shock***

* Physiological response to fear, stress, or emotional

crisis

* Causes person to \_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Sudden temporary dilation of blood vessels reduces

normal blood volume to brain

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Signs and Symptoms***

* Restlessness and anxiety
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ pulse
* Cold and clammy skin
* Profuse \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Face that becomes pale and my eventually become cyanotic (blue) around the mouth
* Shallow respirations
* Blood pressure that falls gradually and steadily
* Loss of consciousness
* Dull, lusterless eyes with dilated pupils
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Nausea and vomiting

***Bleeding and Shock: Part 3 Notes 4.4***

***Treatment for Shock***

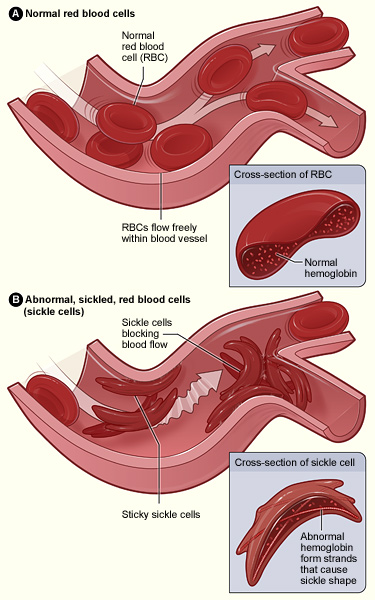
* Maintain a clear airway so breathing is not impaired
* Control all \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Elevate extremities 12 inches to help control \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Splint fractures and elevate if well stabilized
* Avoid rough and excessive handling that my cause additional injury
* Prevent loss of body \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; blanket should be placed under victim as well as on top

***Treatment for Shock***

* Keep victim in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ position
* Do not give victim anything to eat or drink
* Record \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (pulse, blood pressure, respiration rate) every 5 minutes
* Constantly reassure victim; keeping victim calm minimizes effects of shock
* Activate EMS; call 911 immediately

**Sickle Cell**

* **Disease in which the body makes sickle-shaped red blood cells. “Sickle-shaped” means that the red blood cells are shaped like a "C."**
* **Normal red blood cells are disc-shaped and look like doughnuts without holes in the center. They move easily through your blood vessels.**
* **Sickle cells contain abnormal hemoglobin that causes the cells to have a sickle shape. Sickle-shaped cells don’t move easily through your blood vessels. They’re stiff and sticky and tend to form clumps and get stuck in the blood vessels.**
* **The clumps of sickle cells block blood flow in the blood vessels that lead to the limbs and organs. Blocked blood vessels can cause pain, serious infections, and organ damage.**

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