# HEAD INJURIES

VSU HEALTH CENTER VALDOSTA STATE UNIVERSITY FALL 2012

# LET'S TALK ABOUT BRAIN INJURIES!

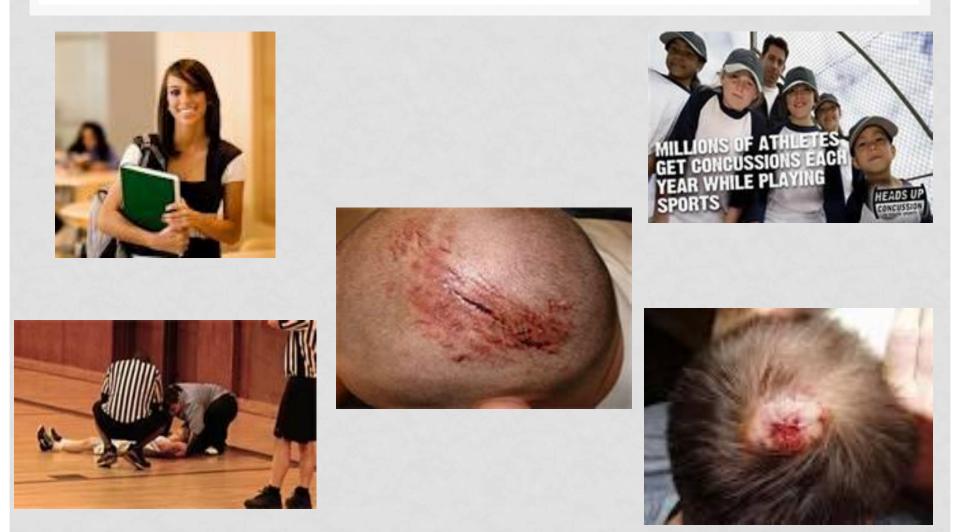
- Traumatic head injury affects more than 1.7 million people in the United States each year.
- Concussions:
  - A concussion is a traumatic brain injury that alters the way your brain functions. Effects are usually temporary, but can include problems with headache, concentration, memory, judgment, balance and coordination.
  - Concussions are common, particularly if you play a contact sport, such as football or rugby. Luckily, most concussive traumatic brain injuries are mild, and people usually recover fully.

# CONTUSIONS, ABRASIONS, LACERATIONS AND MORE!

#### Contusions (bruise):

- As a type of hematoma, a bruise is always caused by internal bleeding into the interstitial tissues, usually initiated by blunt trauma.
- Minor bruises may be easily recognized in people with light skin color by characteristic blue or purple appearance in the days following the injury.
- Abrasions:
  - Abrasion injuries most commonly occur when exposed skin comes into moving contact with a rough surface, causing a grinding or rubbing away of the upper layers of the epidermis.
- Lacerations:
  - Lacerations, irregular tear-like wounds caused by some blunt trauma. Lacerations and incisions may appear linear (regular) or stellate (irregular). The term laceration is commonly misused in reference to incisions.

# PICTURES



## SIGNS AND SYMPTOMS

#### • S&S:

- It is important to remember that a head injury can have different symptoms and signs, ranging from a patient experiencing no initial symptoms to a coma or even death.
- Being unconscious, even for a short period of time is not normal.
- Prolonged confusion, seizures, and multiple episodes of vomiting should be signs that warrant prompt medical attention.
- In some situations, concussion-type symptoms can be missed. Patients may experience difficulty concentrating, increased mood swings, lethargy or aggression, and altered sleeping habits can be noticed.

If you are experiencing any of these signs or symptoms, you need to seek immediate emergency care.

• Have someone take you to the local hospital (SGMC) or call campus health center at 229-333-5886. Please understand that there are some medical conditions that need to be referred to an outside provider. Students are responsible for paying for any services performed by an outside provider.

# HEAD INJURY DIAGNOSIS



- Diagnosis:
  - The physical examination and the history of the exact details of the injury are the first steps in caring for a patient with head injury. The patient's past medical history and medication usage will also be important factors in deciding the next steps.
  - Computerized tomography (CT) scan of the head allows the brain to be imaged and examined for bleeding and swelling in the brain. It can also evaluate bony injuries to the skull and look for bleeding in the sinuses of the face associated with basilar skull fractures.

# TREATMENT FOR HEAD INJURIES

- Treatment:
  - Seeking medical treatment is necessary after experiencing a head injury.
  - Treatment for head injury will be individualized for each patient depending upon the underlying injury and the patient's situation.
  - As with any other injury, the ABCs (airway, breathing, circulation) of resuscitation take priority to restore or support breathing and circulation in the body. Care for the head injury often occurs at the same time other injuries are attended to in the multiply traumatized patient.
  - Follow up is warranted by your provider for any diagnosis of a contusion, concussion, laceration or abrasion.



#### TRAUMATIC BRAIN INJURY MATRIX GUIDE

- The 16 Areas Most Commonly Affected Include:
  - Language/Receptive
    - New Learning
  - Language-Expressive
    - Memory
    - Attention
    - Visual-Spatial
    - Reasoning
    - Sensory Processing
      - Gross Motor
      - Fine Motor
  - Social/Emotional Behavioral
    - Processing Speed
      - Initiation
      - Organization
        - Planning
    - Mental Flexibility

#### CDE CONCUSSION MANAGEMENT GUIDELINES

- A Multi-Disciplinary Concussion Management Team should consist of:
- Family Team the student, the parents, guardians, grandparents, peers of the student
- Medical Team Doctor of Medicine (MD), Doctor of Osteopathic Medicine (DO), Nurse

Practitioner (NP), Physician Assistant (PA), a licensed psychologist (specifically either a neuropsychologist or specialist in concussion management). Adjunct team members may include:

- physical therapist, massage therapist, chiropractor, and occupational therapist. These professionals cannot medically clear the student-athlete of the concussion but they can be involved in the treatment of the concussion.
- School Team the school team has two distinct and important parts:
  - The physical team may include the certified athletic trainer, school nurse, coach, and physical education teacher, the Athletic Director and others.
- The academic team may include the teacher, counselor, school psychologist, and school social worker, an Administrator and others.

#### GRADUAL RETURN TO ACTIVITY PLAN

- A Successful Gradual Return to Activity Plan Has Two Parts:
  - Return to Academics—a gradual return to school and academic requirements implemented by the teaching staff
  - Return to Play—a gradual return to sports implemented by the athletic staff

### REFERENCES

- Centers for Disease Control and Prevention. (2010). Facts About Concussion and Brain Injuries. Retrieved from <u>http://www.cdc.gov/concussion/pdf/Fact\_Sheet\_ConcussTBI-</u> a.pdf
- Colorado Department of Education. (2012). Concussion Management Guidelines. Retrieved from <u>http://www.cde.state.co.us/HealthAndWellness/do</u> wnload/Brain%20Injury/FinalConcussionGuidelines8.22.1

2.pdf

- Google. (2012). Head injuries images. Retrieved from <u>http://www.bing.com/images/search?q=head+injuries&FORM=H</u> <u>DRS</u>C2
- ORCAS. (2011). Concussion Management Team Packet. Retrieved from <u>http://orcas-</u> <u>sportsconc2.s3.amazonaws.com/files/A\_CMTPacket.pdf</u>
- Traumatic Brain Injury Networking Team. (2012).TBI Matrix Guide. Retrieved from <u>http://cokidswithbraininjury.com/educators-and-professionals/information-</u>matrix/