"Coach, My Neck Hurts!"

Care of the Spinal Injured Football Player

Becky Anhold, VATL, ATC, EMT-E, EMS Educator
Fort Defiance High School
Bridgewater Volunteer Rescue Squad
Mt. Solon Volunteer Fire & Rescue
Introduction

Cervical Spine Injuries – Catastrophic, Devastating

Learning how to care for the potentially spine injured football player is essential for all health care providers involved.
So, what is an ATC?

Certified Athletic Trainers

- College grads
- NATA BOC
- Licensed in Virginia

Specialize in:
- Injury prevention
- Recognition
- Evaluation
- Treatment
- Rehabilitation
- Mass chaos!
Why are we here?

Spine injuries in FB
Why are we here?

Football players like to hit hard!

- 2005-06 – 9 high school sports studied
  - higher injury rates and greater proportions of head/face/neck injuries, concussions, and severe injuries in *competitions*.
  - had the highest injury rates
- 1977-2005 Nationally
  - 256 CSI in football – Rec. league ➔ Pro.
  - 211/256 – high school
Eric LeGrand Injury
Recommended practices

1998

- Inter-Association Task Force for Spine Injured Athlete
- Experts from across the medical spectrum.

2001 – “Pre-Hospital Care of the Spine Injured Athlete”

Script available @ CSEMS website...
http://csems.vaems.org/downloads/
Cervical Spine Injuries

Common MOI

- Axial Loading
- Head down contact (Spearing)
- 1976 rule change made spearing illegal
Cervical Spine Injuries

Axial Loading

- **1976** rule change made intentional spearing illegal
- **2005** rule change made unintentional spearing (ANY use of helmet, including facemask to butt or ram the opponent) illegal
- STILL OCCURS!
Protect that Noggin!

Football helmets just aren’t the same as other helmets designed to fit snug to protect the head from repetitive collisions.
<table>
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<td>Riddell 360</td>
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<td>STAR Value: 0.239</td>
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<td>Riddell Revolution Speed</td>
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<td>Cost: $243.99</td>
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Ouch, my neck hurts!

Assume there is a spine injury until proven otherwise

- Scene Size-up
- Cervical Spine Immobilization
- Primary Assessment
  - LOC, ABC’s
- Assess neurological status
Ouch, my neck hurts!

- Leave the helmet in place if securely fitted to the head (leave the shoulder pads as well)

- Remove the face mask completely regardless of current respiratory status
Ouch, my neck hurts!

Face Mask Removal

- Have proper tools available
- Various tools – I suggest having a variety

A. Modified PVC pipe cutters
B-D. Various Pruners
E. Florian Tool
F. Trainer’s Angel
G. FM Extractor
H. Screwdrivers
  - Manual or Power
  - Flat and Phillips
Removing the facemask

C-spine stabilization is key!

Cut/remove all 4 clips holding face mask in place
Immbilization of the athlete

Once face mask is removed

- Prepare immobilization equipment
- 6+ person lift to move athlete to board
  - 1 at the head
    - Hands placed on athlete’s shoulders (under the pads), thumbs pointed away from athlete’s face
    - Athlete’s head then rests between rescuer’s forearms
  - 1 on each side of shoulders – slide hands beneath scapulae & ribs
Immobilization of the athlete

6+ person lift to move athlete to board
- 1 on each side of hips – slide hands beneath lower back & buttocks
- 1 on each side of legs – slide hands beneath thigh & low leg
- 1 person to slide board beneath patient
Immobilization of athlete

6+ person lift continued

- Upon command of head, lift athlete 4-6”
- Slide board beneath patient from feet
- Upon command of head, lower athlete to board
- Secure to board with straps
6+ Person Lift Method
Helmet & Shoulder pads

When to remove Helmet & Chin Strap

Removed only if:

- they do not hold the head securely
- design of the helmet & chin strap prevents adequate airway control
- face mask cannot be removed in a reasonable amt. of time
- helmet prevents adequate immobilization
Removing the helmet

C-spine stabilization is key

Place hands on the chin and back of the head
Removing the helmet

- cut the chin strap, deflate air padding
- use 2 tongue depressors or flat blade to unsnap & remove cheek pads
- rotate posterior aspect of helmet off occiput then pull helmet off head
- DO NOT spread sides of helmet to remove
Keep the spine in line!

- the helmet & shoulder pads elevate the trunk when supine
  - Should either be removed, spinal alignment must be maintained
Helmet & Shoulder pads

Shoulder pad removal

Removal recommended when:

- Helmet is removed
- Multiple injuries requiring full access to shoulder area
- Ill-fitting shoulder pads cause inability to maintain spinal immobilization
Shoulder pad removal

To remove

- Cut jersey off, laces over sternum, and straps
- C-spine control from front (cephalad direction)
- 6+ person lift on command of head
- Flip right & left sides of pads up past the head and slide them out from under the torso
- Slide board beneath patient
- Lower onto board upon command of head
Schutt Ion Helmet

CUT TOP CLIPS
Schutt Ion helmet

ion 4d football helmet faceguard removal 4pt high chin strap youtube.avi
Summary

Practice, practice, practice!

- These skills are not easy to perform efficiently.
- Practice improves efficiency
References


