Getting a Head in Cycle Somatic Injuries
OK(lahoma) Ways to Remove a Helmet

2010 EMS State of the Science Gathering of Eagles XII

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The Oklahoma City & Tulsa Metropolitan MCB Affiliated EMS System

- 1,100 square miles
- Population
  - 1.6 million day
  - 1.25 million night
- 168,432 calls (2009)
- 124,695 transports (2009)
- 74% transports
We can do better than this...
EMS Removal of Helmets

“The Consensus”

“Leave in place” unless airway issue.
Let the “experts” in the hospital handle it.
EMS movement will damage the spinal cord.
“Because the EMTs weren’t trained... unaware of dangers of removing a helmet... Fortunately in this case, the athletic trainers... safeguarded against more severe injury to the player.”
Further advice...

• “vital for providers to practice this protocol with a qualified individual, such as an athletic trainer.”
NATA guidelines

- Routine removal “controversial”
- PHTLS favors complete vs. facemask alone
- No clear evidence for “best practice”
- Helmet/pads one unit
- Local standards
EMS Removal of Helmets
“The Reality Check”

Consensus makes fundamental leap of faith in establishing “expertise.”

One “consensus” document begets another.

When the basis is wrong, then the consensus must be flawed.
Not a foregone conclusion...
Field removal of helmets will not incur daily calls such as these...

Medical Examiner

slide for involuntary defecation
Primum Non Nocere

Sometimes it means doing something different from the masses.
EMS Removal of Helmets
Oklahoma City & Tulsa Standard of Care

All helmets are removed by EMS on scene.

EBM review of removal tools.


Hands-on training for all EMS personnel.
FM Extractor

• Fastest removal
  – 1 cut per fastener
• Preferred in studies
• Less movement
• May be necessary for pro helmets (Riddell)
• $274 as of 2/23/10
Trainer’s Angel

- Specifically for side fasteners
- 1-2 cuts per fastener
- Least preferred
- $42.50
Anvil Pruners

- Close in efficiency to FM extractors for most helmets
- 1-2 cuts per fastener
- $12-60
Trauma shears in helmet removal...
(but can be useful in pad removal)
Cordless Screwdrivers?
Don’t forget about ear pads, filler pads, and air bladders.
Support in AP plane until pads are off!
2010 EMS Safe Helmet Removal Summary

• EMTs are the immobilization experts
• Hands-on training (& retraining) is required
  – Use the actual equipment encountered
  – Use the right tools
  – Football – everyone should cut fasteners
• Clear protocol needed (pictorial heavy helps)
• Better spinal care and better patient access