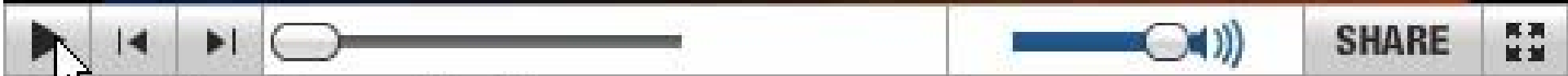


HEAD INJURIES PLAYING SOCCER

Are we doing enough to protect our players?





Concussion Danger For Teens



Are Head Injuries Occurring?



Are Head Injuries Occurring?



Are Head Injuries Occurring?



How Are Head Injuries Occurring?

- Heads hitting hard objects (most frequent cause)
 - Elbow of another player
 - Head of another player
 - Goal posts
 - The ground
 - Another player's knee or foot

* (Mechanisms of head injuries in elite football. Br J Sports Med. Dec. 2004)

- Heading (repetitive or high speed balls)

How Are Head Injuries Occurring?



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How Are Head Injuries Occurring?



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How Are Head Injuries Occurring?



Prevention



Studies

Department of Surgery, Central Hospital,
Rogaland, Stavanger, Norway

"Head and neck injuries in soccer. Impact of minor trauma" (Sep. 1992) (106 soccer players studied)

-81% of former players were found to have impairment of attention, concentration, memory and judgment that ranged from mild to severe

*No finding that impairment due to head injuries.

Preventative Measures:
Should We Consider Using Headgear?

Petr Cech- Chelsea



Preventative Measures:
Should We Consider Using Headgear?

Alecko Eskandarian-DC United



Should We Consider Using Headgear?

FIFA's current position: Headgear is optional

- * However, a study by its Sports Committee concluded that headgear provides no measurable benefit in head-to-ball impacts, but does provide measurable benefit in subconcussive head-to-head impacts.

Should We Consider Using Headgear?

U.S. Soccer Federation's current position:

Headgear is optional

Should We Consider Using Headgear?

U.S. Soccer Federation's Sports Medicine Committee's position: (date unknown)

Found no evidence that that wearing headgear is beneficial to players

1. Concussions often caused by force when head and neck snap back after impact. Will still happen with headgear.
2. Use of headgear may increase frequency of concussions if players develop a false sense of security.
3. Head injuries increased in other sports after headgear introduced.

Should We Consider Using Headgear?

Reasons given for not using:

1. May not prevent concussions.
2. May increase brain injuries (false sense of security)
 - players may become more aggressive
 - will play too soon after a concussion
3. Changes the game-impossible to head correctly
4. Expensive (approximately \$30.00)
5. Players won't wear them.

Should We Consider Using Headgear?

Reason for using:

1. **Prevent Brain Injury**

-supported by a # of studies

Studies

American Academy of Pediatrics (Dec. 1998):

Pediatric Committee Issues Warning on Youth Soccer

- Recommends against intentional repetitive heading of the ball in youth soccer until more is known about the associated risks.

Studies

McGill Sports Medicine Clinic: (Feb. 2008)

“The effect of protective headgear on head injuries and concussions in adolescent football (soccer) players” (Oakville SC-ages 12-17)

- 47.8% of players experienced symptoms of concussions
 - Only 26.9% of those who wore headgear had concussions
 - 52.8% of those who did not wear headgear had concussions
- Headgear may decrease the risk of sustaining concussions and injuries to the head

*Dr. Scott Delaney, British Journal of Sports Medicine (July 2007)

Studies

Washington University Department of
Emergency Medicine (Jan. 2003)

With the use of headgear, there is a statistically significant decrease in impact at the highest speeds and pressures tested, suggesting the **headbands may play a role in decreasing impact for more forceful blows.**

www.ncbi.nlm.nih.gov/pubmed/16046355

Studies

British Journal of Sports Medicine (Aug. 2005):

“Effectiveness of headgear in football (soccer)”

The football headgear models tested did not provide benefit during ball impact. **However, the headgear provided measurable benefits during head to head impacts.**

www.ncbi.nlm.nih.gov/pubmed/14751945

Studies

Psychological Brain Function Study of Effects of Heading Soccer Balls (2003)

"More individuals were likely to be impaired in the frequent heading groups than in the less frequent heading and control groups"

-Individuals who headed the ball frequently the night before a neurocognitive test were more likely to score lower on the test than players who headed the ball less frequently.

Preventative Measures: Should We Consider Using Headgear?

The State of Massachusetts considered a law mandating the use of headgear for soccer players.

“All players shall wear helmets designed to protect against head injuries”

House Bill No. 1137.

Inconsistent Positions

1. Shin guards are mandatory, but headgear is not.
2. Headgear is mandatory for Middle School goalies, but not for younger and older goalies.

WHY???

Some Companies Offering Headgear*

1. djOrthopedicsHatTrick (www.djortho.com)
2. Full90 Sports (www.full90.com)
3. Innovative Patents (www.forcefieldheadbands.com)

* This is merely a list of some of the companies offering headgear. Including these companies is **not** an endorsement of their product.

Headgear

- * Any headgear purchased should, at the very least, comply with standards set forth by ASTM International (formerly the American Society for Testing and Materials)

-For more information, visit "www.astm.org/standards"

??? QUESTIONS ???

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