Sports Psychiatry

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- Consultant
  - NFL
  - NCAA/PAC-12
  - Calif Research Council
- Patent pending
  - Eye-tracking
- Copyright
  - BDSA
Overview

- Discuss history of sports psychiatry
- Define and describe the field
- Hot topics
  - Concussion
  - ADHD
  - Substance use
- New advances
History

- Ancient Greeks described the role of exercise in health
- Athletes revered
- ISSP
  - Founded Jan 10, 1994
- WPA, Section on Exercise, Psychiatry and Sport
  - Established April, 2002
- BIM
  - 1st exam Oct. 2013
What is Sports Psychiatry?

- Subspecialty focused on athletes as a *unique* pt. population (how they think, feel, and behave)
  - Similar to C/A, Gero, Addiction
  - Focused more on psychiatric sx. and syndromes
  - Sports psychology more on performance-enhancement
  - Emerging field

- Focus shifting to science/evidenced-based
- Not merely “show and tell”
- Translational approach
- Osteopathic philosophy
What makes athletes unique?

- Bio-psycho-social perspective
  - “OC” traits
  - BPS impact of intensive training
  - Socio-cultural influences (key factor in global culture)
    - Beijing, Rio, and Sochi Olympic Games
    - World Cup events
- Nature vs Nurture
  - Genetic- Epigenetic
Topics of interest for Sports Psychiatrists

- Athlete's experience every form of psychopathology
- Concussion
- Doping
- ADHD
- Depression
Concussion
Definition of Concussion
(International Consensus)

- A complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces

- Caused by direct blow to the head, face, neck, or elsewhere on the body with “impulsive” force transmitted to the head
Game over for concussio

debate: USA TODAY 3-8-2015
mTBI: Are We Speaking the Same Language?

Is it really??
Don’t manage concussions.
Manage athletes/service-people
Is There any Consensus on Concussion?

- 4 separate conferences aimed at reaching consensus of understanding and management of sports concussions
  - Vienna 1\textsuperscript{st} - 2001
  - Prague 2\textsuperscript{nd} - 2004
  - Zurich 3\textsuperscript{rd} - 2008
  - Zurich 4\textsuperscript{th} - 2013
  - Berlin 5\textsuperscript{th} - 2016
- Consensus decisions reached by votes from a panel of international concussion experts (Concussion in Sports Group or CISG)
- Not all data driven (clinical experience)
- \textit{Everyone’s Story}
- IOM and National research Council (Oct, 2010)
  - Committee on Sports-related Concussion in Youth
  - CDC Advisory Board - Community Huddles
Concussions still clouded in mystery

“Professionals cautioned against blowing media coverage out of proportion and making a culture of fear rather than focusing on how to make improvement without demonizing sport”.

Head trauma and concussion in athletes Daily update · April 4, 2015
"We can only test so many things, but there’s still a level where the athlete has to be honest with you about how they feel."
DTI imaging 1.6 to 3.8 million *sports-related TBIs* occur each year
Common Initial Signs and Symptoms

- **Confusion**
  - Slurred or incoherent speech
- **Amnesia**
  - Vision changes
- Bell rung”/”feel in a fog”
  - Balance problems
- “Don’t feel right”
  - Dizziness/vertigo
- Vacant stare
  - Incoordination
- Loss of Consciousness
  - Poor concentration
- Seizure
  - Memory deficits
- Delayed verbal or motor responses
  - Emotional lability
- Incoordination
  - Personality change
  - Irritability
  - Nervousness
Depression in Athletes

- Presentation varies
- Impacts performance and life
- More common in transition periods
BDSA (Baron Depression Screener for Athletes)

- I feel sad even after a good practice session or successful competition
- I rarely get pleasure from competing anymore and have lost interest in my sport
- I get little or no pleasure from my athletic successes
- I am having problems with my appetite and weight
- I do not feel rested and refreshed when I wake up
- I am having problems maintaining my focus and concentration during training and competition
- I feel like a failure as an athlete and person
- I cannot stop thinking about being a failure and quitting sports
- I am drinking alcohol or taking supplements to improve my mood
- I have thoughts of ending my life

0- Never

1- some of the time over a two week period

2- most of the time over a two week period

Greater than 5 is a positive screen.
Doping in sports

- Performance-enhancement
- Extend careers
- Culture some sports (cycling)
- Goldberg Effect 1992
Drug Testing in Sport: History

- Berserkers – ancient Nordic warriors
- 1400 BC Susruta Indians consumed testicular tissue
- West Africans, Mexican & Andean Indians used cola plant, peyote plants & strychnine
- Ancient Greek Olympians
Drug Testing in Sport: 
**History**

- First drug-related death: 1886 English cyclist overdosed on ether
- Mixtures of strychnine & alcohol
- Amphetamines replaced in 1930’s
- 1960 Summer Olympics saw death of Danish cyclist from use of amphetamines & cough medicine
Gene Doping

Science and sport converge once again as medical research charts the complexities of genetic treatment. A look at the facts, and the dangers of gene doping, and at what WADA is doing to fight this new threat.

A genetic delivery device, or vector (in this case an adapted virus), delivers its payload to the nucleus of a muscle cell. See full feature on Page 2 and more detailed explanation on Page 5.
ADHD in Sports

- Over represented in athletes
  - NFL, MLB, NHL
  - Michael Phelps
  - Simone Biles
- Relationship with concussion
- TUE
  - Doping vs tx?
Thank you for your attention

✨ Questions

✨ comments