RINGSIDE MEDICINE

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HISTORY OF BOXING

- Ancient Greece/Ancient Rome
- Olympic sport since 688 B.C.
- Broughton’s rules (1743)
- London Prize Ring rules (1838)
- Marquess of Queensberry rules (1867)
- Professional vs. Amateur boxing
- The Professional Boxing Safety Act (1996)
- MMA Unified Rules of Conduct (2001)
BOXING AND MEDICINE

- Hollywood vs. Reality -- “cut me, Mick”
- AMA – The Council on Scientific Affairs
- American Association of Professional Ringside Physicians (1997)
- Association of Boxing Commissions (ABC)
- United States Boxing Association (proposed)
SPORTS RELATED FATALITIES

- Early 1990’s study out of the UK - 708 sport fatalities between 1988-1992
  - Water sports (swimming, boating)
  - Motor sports
  - Mountain climbing
  - Air sports

- Fatalities per 100,000 participants
  1. horse racing 128
  2. sky diving 123
  3. hang gliding 56
  4. mountaineering 51
  5. scuba diving 11
  8. college football 3
  10. professional boxing 1.3
AAPRP RECOMMENDATIONS

- Basic medical requirements for boxing/mma
  - Brain CT or MRI – baseline, for cause
  - Dilated eye exam – before each fight
  - Infectious disease testing – 180 days
  - EKG, cbc, pt/inr – before each fight (NJ)
  - Serum or urine HCG – before each fight
  - Questionnaire & physical – at the venue
  - Complete H&P with neuro – yearly
AAPRP RECOMMENDATIONS

- Other requirements and recommendations
  - Pre-hospital personnel with ambulance at the venue at ALL TIMES
  - Urine testing for illegal substances
  - Disposable gloves for all official
  - Minimum automatic suspension periods

- Medical data bank
- Annual Ringside Medicine conference
- Certification program
- Affiliation with the American College of Sports Medicine
ROLES AND RESPONSIBILITIES OF THE RINGSIDE PHYSICIAN

● Profile of a Ringside Physician
  ● More than just a fan
  ● Experience in trauma assessment
  ● Airway management skills
  ● Orthopedic knowledge
  ● Interpersonal abilities
  ● Common sense and decisiveness
  ● Promote safety standards

● Review of medical testing
ROLES AND RESPONSIBILITIES OF THE RINGSIDE PHYSICIAN

- Pre-fight exam (weigh-in or at venue)
  - Avoid the hype – make your space
  - Talk to the fighter – use interpreters
  - Brief but thorough exam
  - Address abnormal findings
  - Document – this is a medical record!
ROLES AND RESPONSIBILITIES OF THE RINGSIDE PHYSICIAN

- Post-fight exam (in ring or dressing room)
- Take control – tune out the chaos
- Stay with fighter until stable
- Address all injuries/dehydration
- Suspension forms/instruct corner
- Head injury cards (bilingual)
- Document – including AMA!
WORKING THE FIGHT

- Be prepared!
  - Check your bag
  - Identify your EMT crew – best exit
  - Know the local ED/trauma center
  - Be clearly identifiable
  - Bond with the referees/inspectors

- Stay focused!
  - Watch for clues of a fighter in trouble
    - Momentum changes
    - Signs of exhaustion
    - Changes in style or strengths
  - Communicate with the referee
  - Decisions from the ring apron
  - Decisions from inside the ring
WORKING THE FIGHT

- Stopping a fight
  - Be confident but be reasonable
  - Know the fighter and the circumstances
  - Lacerations: location>depth>bleeding
  - Neurologic: mental status evaluation
  - Musculoskeletal: may be subtle
BOXING RELATED INJURIES

- Acute brain injury
  - Subdural hematoma
  - Concussion
  - Second impact syndrome

- Chronic brain injury
  - Dementia pugilistica
  - Parkinsonian features
  - Depression and suicidal tendencies
BOXING RELATED INJURIES

- Non-neurologic emergencies
  - HEENT trauma
  - Blunt chest trauma
  - Blunt abdominal trauma
  - Orthopedic trauma
  - Acute psychiatric episodes
  - Cardiac emergencies

- MMA and female boxing issues

- Spectator issues – Good Samaritan?