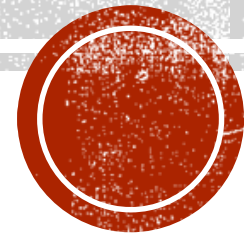


CONCUSSION EVALUATION

Brandon Mines, MD

Emory Sports Medicine Center



DISCLOSURES

- none



CASE



- Corner back
- Makes a big tackle, but looks fine
- At end of series, self reports
 - bit of a mild headache
 - Vision seems “off” in one or both eyes
 - Shocks of light, like occasional camera flashes
 - Occasional bluriness



CASE



- Sideline evaluation
 - No other sx's
 - Normal neuro exam
 - Maddocks question
 - Took some seconds to remember what team he played last week, but eventually got it right



CASE: VIDEO REVIEW

- Helmet to helmet
- Got up from turf appropriately
- No ataxia
- Out of abundance of caution, head to locker room for evaluation



CASE: LOCKER ROOM EVALUATION

- Scat-5
 - Headache - 1
 - Concentrating -1
 - Irritability -1
 - Memory recall at about baseline
 - Number backwards a bit below baseline
 - A little shaky with single leg balance but did report ankle injury in last 6 months



CASE: LOCKER ROOM EVALUATION

- Vision
 - Normal acuity
 - PERRLAB
 - EOMI
 - The “shocks of light” have dissipated
- Normal neuro exam



CASE: LOCKER ROOM EVALUATION

- Known for not eating enough breakfast/food pre-game
- Having quite a few home social stressors
- Appears to have normal temperament/personality



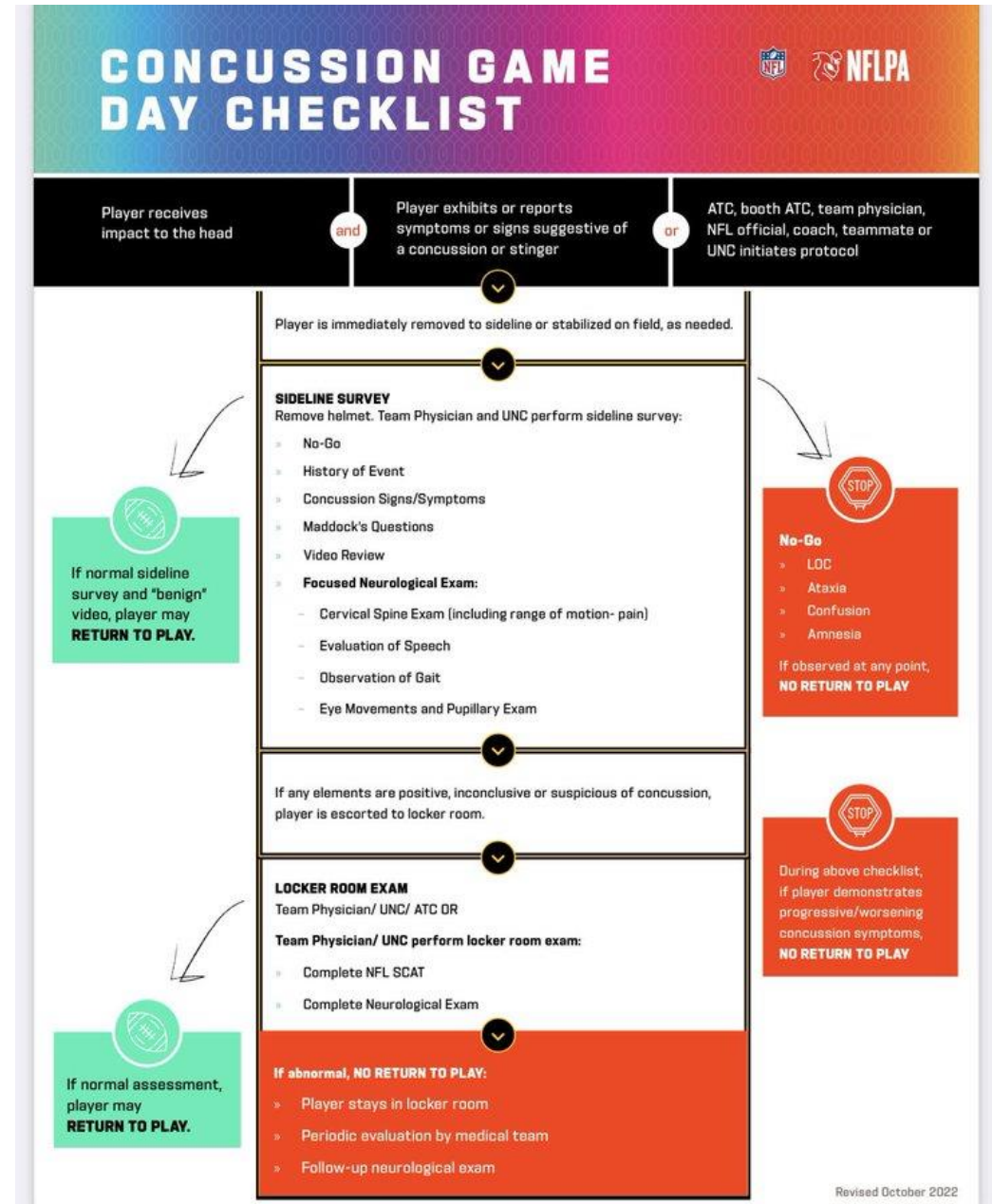
CASE: WHAT'S THE CALL?

- Symptoms concern you?
- How much is real from the hit versus stress, nutrition?
- What do you make about the eye symptoms?



HOW TO MAKE THE CALL?

- No-go signs and symptoms
 - LOC
 - Ataxia
 - Confusion
 - Amnesia
- General signs & symptoms
 - Build suspicion but NOT definitive
- Scat-5 testing
 - Can build MORE suspicion, but NOT definitive



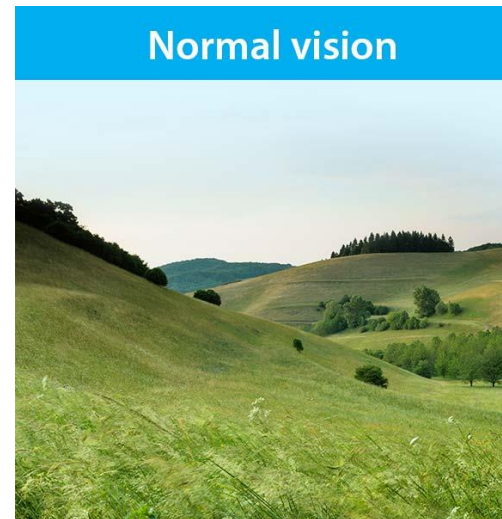
HOW TO MAKE THE CALL?

- How well do you know the player?
 - Personally
 - Medically
- Can you integrate the data into a cohesive balance?



DIAGNOSIS

- NO CONCUSSION
- *Ocular migraine*
 - Visual disturbances
 - Zig zag lines
 - Blurry
 - Blind spots
 - With or without headache
 - Neurology consult
 - Brain MRI normal



HOW TO MAKE THE CALL?

- Examiner experience is ***THE*** most important variable



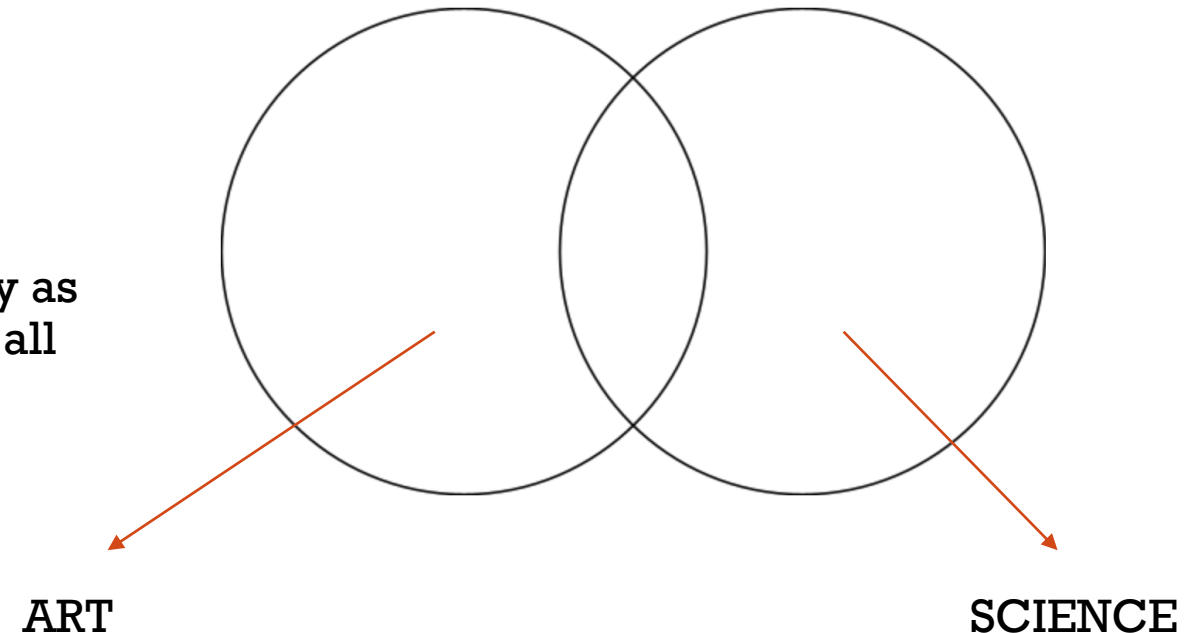
CONTRAST OF INNOVATION & EXPERIENCE

- Old school, but reliable
 - lung percussion for consolidation,
 - auscultation for cardiac rub & pneumonia
- Over the millennia, most important thing in medicine is using your eyes, memory, interview skills, physical exam & “gut” to make a decision
- Why do we call it “Art of medicine”?

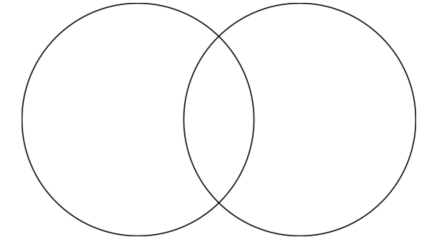


CONTRAST OF INNOVATION & EXPERIENCE

- Gut – what is that?
 - Intersection of Art & science
- Literally taught to doctors
 - How to make a decision based on information provided to you.
 - What is done with that information is only as good as the human computer that puts it all together



INTERSECTION OF ART & SCIENCE



- Thought experiment...
- Not a benign diagnosis
 - Players are generally flagged as high risk
 - 3 or more concussions diagnosed
 - ALWAYS err on the side of caution
 - BUT once labeled with concussion diagnosis, it sticks. No way for player to refute.
 - If you UNDER call it, you put player at increased risk due to returning to play too soon



TAKE HOME POINTS

- Know your athletes
 - Fears, likes, current social issues
- Know their medical history
- Concussion diagnosis is a big deal
- Trust your gut...



THANK YOU

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