

CONCUSSION STUDY RESULTS



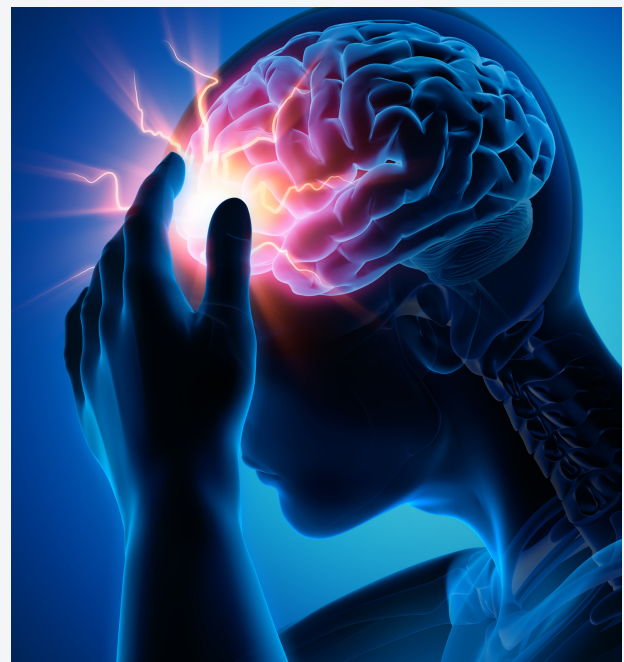
How the Effect of Concussions on Responsiveness Increases Risk of Future Injury

WHAT WE WANTED TO KNOW

We know about a correlation between concussions and injuries that happen later, but we want to understand why this happens. In this study, we specifically looked at the reaction time and eye movements of athletes after they had a concussion.

WHAT WE DID

We observed several high school athletes and monitored them for injuries. We compared what happened to athletes who never had a concussion to athletes who were cleared to return to playing sports after they recovered from a concussion. We measured the responsiveness (eye motion tasks and reaction time) of both groups of athletes to see if we could find any differences. At least 15% of youth athletes are known to suffer concussions from playing sports, and we designed this study to hopefully find information to help doctors decide when to let concussed athletes return to sport.



WHO WAS IN THE STUDY



**9 FEMALES
11 MALES**



AVERAGE AGE: 16



**12 ATHLETES WITH CONCUSSIONS
8 WITHOUT CONCUSSIONS**

Among the athletes with concussions, 5 were female. Among those without concussions, 4 were female.



WHAT WE LEARNED

- There was no major difference in responsiveness between the post-concussion and no concussion groups for an eye movement test we administered (King-Devick).
- The post-concussion group actually performed better on the reaction time test that we administered.
- The relationship between post-concussion athletes and responsiveness was inconclusive.



WHAT THESE RESULTS MEAN

These results suggest that after a doctor clears a high school athlete to return to sports after a concussion, their responsiveness is the same as other high school athletes who have never had a concussion. This means that the deficits caused by a concussion are potentially resolved by the time of clearance to return to play or require more complicated testing to detect. These study results may not be applicable to each person. Additional information may be available from other studies now or in the future.