Head Games: Concussions May Keep Players Off the Field

By Joshua Pittman

DJ Turner, a University of Maryland wide receiver, suffered a concussion last year in one of the biggest games of his career vs. Penn State. Turner did a slant over the middle and saw the ball spiraling toward him over the middle. As Turner leaped into the air to catch it, he saw a Penn State safety coming towards him leading with their helmet and was hit. After the hit Turner had no idea where he was until after a couple of minutes of slow breathing.

The recovery process was about one month and was extremely painful, Turner said. He couldn't watch TV, be in a room with lights, or use his cell phone. Any type of bright light caused severe headaches and that the only way he made it through the process to play again was therapy and avoiding bright lights.

CTE, known as chronic traumatic encephalopathy, is a brain disease caused by multiple concussions or head trauma.

CTE develops over time due to many concussive hits over the course of an athlete's career, especially in the NFL. CTE has been a more serious issue in the NFL more than any other sport because the NFL is a collision sport and players are hit multiple times throughout a game. Half the players have minor concussions that are left alone or untreated, while the other half heal from diagnosed concussion's and continue to play.

TE and the NFL have been battling each other for years. In 2013, the NFL reached a \$765 million agreement with 4,500 former NFL players for head trauma lawsuits. In 2016, the NFL had settled concussion lawsuits with 20,000 former players through a \$1 billion–payment, according to an article published on the website medium.com.

The New England Patriots require a lot from their players to win multiple championships within this past decade. Patriots players sacrifice their bodies day in and day out to remain the best team in the NFL each year and because of this Junior Seau and Aaron Hernandez suffered severely. These two are the most wellknown NFL players diagnosed with CTE and to have also died from it.

Hernandez was an excellent football player who was charged with first-degree murder and sentenced to life in prison. While serving his sentence at maximum security prison in Massachusetts, Hernandez committed suicide on April 19, 2017. He was 27. An autopsy found in Hernandez's brain that he had suffered repetitive brain trauma for more than a decade and that led to him being diagnosed with CTE. Hernandez also had the most severe case of CTE ever discovered at a person his age, which would have affected his decision making, judgment and cognition, according to the Washington Post.



Similarly, Junior Seau, the former all-pro line-backer for the San Diego Chargers, committed suicide in May 2012, two years after his retirement. He was diagnosed with CTE after a doctor examined his brain posthumously and told his family it was the cause of a lot of head to head collisions throughout his 20-year NFL career, according to ESPN. The collisions Seau developed led to the deterioration of his brain and his ability to think logically, which led to his death, according to ESPN.

Seau's family had described drastic changes in the last few years of his life that included mood swings, depression, insomnia, forgetfulness and detachment, according to ESPN.com Seau shot himself in the heart and this tragedy shocked the nation and raised awareness of the seriousness of CTE.

eau's death occurred during a time when the NFL was being sued by more than 4,500 former NFL players alleging that the league ignored and denied the link between football and brain damage. After a few years the NFL decided to disband a controversial committee on concussions that was established in 1994 under the NFL's former commissioner Paul Tagliabue, according to ESPN.Com.

CTE can't be diagnosed in living people, but only by examining brains that are removed during autopsy. CTE symptoms include paranoia, memory loss, confusion, impaired judgment, impulse control problems, aggression, depression, anxiety, suicidality, parkinsonism and dementia. All these symptoms are lethal and take make matters even worse there is no cure for CTE.

In 2017 Ann McKee, a neuropathologist at the New England veteran's administration medical center, conducted a study involving 111 former NFL players and 110 of them were diagnosed with CTE. McKee told the website medium.com that she believed that the players had sustained at least tens of thousands of sub-

concussive hits throughout their careers.

The public awareness of the brain disease has transitioned from the field to the silver screen. In the film, "Concussion" the plot centers on a couple of former NFL players who started acting strangely after retiring from football and later describes how they've been diagnosed with CTE and how it affected their brains. Bennet Omalu, a forensic pathologist and neuropathologist who was played by Will Smith in the film, was fighting against the NFL because they were trying to suppress his research on CTE. Omalu's main objective was to inform players of the true risks they take by playing.

ormer Pittsburgh Steelers player Mike Webster suffered from depression and later died of a heart attack. The cause of death made no sense to Omalu, so he conducted an autopsy, examined Webster's brain and found CTE as the main cause of everything. The NFL initially tried to discredit Omalu's research based on how this could drastically affect their multibillion-dollar league, but eventually decided to make changes that focus on players' safety.

The NFL and college football have made several rule changes to focus on CTE and the safety of all football players. Both the NCAA and NFL have implemented the targeting rule, meaning no player can lead with the head to make a tackle because the result is mostly helmet-to-helmet contact. Helmet-to-helmet contact is the fastest way to a concussion. Also, no player can hit a defenseless player in the back or the side, as this also leads to serious injury. The NFL and NCAA have also made concussion helmets that seemed to ease the impact of hits from time to time, but they don't prevent concussions.

he only way football players can prevent concussions is through form tackling, which is something all NFL and NCAA players learned in little league football. There are six steps in form tackling, according to the website Ducksters.com The first step is to always keep your head up and the second is to hit the player on the thigh pad with your helmet across the body. The third step is to keep your back straight and the fourth step is to wrap both arms around the player, preferably around the legs. The fifth step is to pull the player sharply towards you with your arms and the very last step is to lift and drive.

Football is a collision sport and no rule or equipment can change that. The impact between players is always going to make the sport of football a high risk. Since players always go for the big hit, concussions will remain inevitable.

Still some players, like Turner, the UMD wide receiver, said he is going to remain cautious throughout his football career to avoid CTE.

