Spring 2018

Athletic Injuries and Their Effects on the Athlete

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Abstract

When reading this paper, you will learn about all the hardships and injuries and their effect on the athlete. When I use the term injuries, I am talking about injuries such as shoulder and quad tears, knee tears, broken bones, and concussions. Concussions are not considered to be on the same level as its counterparts, they still carry weight in a conversation. Athletes and parents all around the country are concerned about this matter. I have broken down what the anatomy of the injury. To those who are not familiar with the body, this will help better under what is going on. Then I go on to tell about what happens at the point of impact with the injuries and what is going on through the body. Next, the I discussed what would treatment would be like for the athlete when he is able to. I have given example of different athletes who I researched that had the same injury and what happened with them. To conclude each section, there are paragraphs to inform you what is the possible mindset of the athlete. I also conducted three interviews to enhance the knowledge from a physical standpoint. My three interviews were with a football player who blew out his knee, an athletic trainer, and strength and conditioning coach. All three different viewpoints of injuries and what all they entail.

Athletic Injuries and Their Effects on the Athlete

Throughout an athlete's career, no matter the duration of it, the majority will experience some type of injury to the body. For most, those who are lucky, will only suffer minor injuries such as sprains, spasms, or pulls. Meanwhile, those who are unfortunate, experience the suffering of an injury that could sideline them for an extended time or even alter their lives and careers. It is noted that the human body is capable of endless possibilities, but what are the effects that happen to the body after a severe injury. The injury not only causes a crisis because of the severity but also causes a crisis because of the mental tear it has on the person's psyche.

This topic is mostly known for big-time athletes who are prominent in their respective careers to have a severe injury and it affects them tremendously. When looking into the careers of people like Tracy McGrady or Derrick Rose there is always the question, "What if they never got hurt?" That question has been asked countless of times by many athletes who people would say have fallen off since their dominant years. Others like Bo Jackson, who is still considered to be the greatest athlete of all-time, had a crucial injury that ended his career right when it was getting started. While in the prime of his career, Jackson was immediately struck by devastating news. Jackson's career was cut short due to an injury that would end his career instantly or he had endured an injury that we did not understand until this day. On the opposite end of the spectrum, you have someone such as Greg Oden, who was destined to be an NBA star but being plagued by injuries he is in conversation to be one of the biggest busts of all-time.

With that being said, in this paper you will read upon reasons as to why those whose careers were cut short or never got started because of serious injuries that took away their promising careers. There have always been conversations whether it be on a sports network or even in the local barbershop, "what happened?" When looking into an injury you have to

consider what goes on from when the injury first occurs to when they are able to return to the field and on from that. People do not understand that this is a difficult process to come back from. It is even more taxing when your livelihood depends on how good you are or if you are still the same person you were before you got injured. Those who have never been injured, especially those who never played sports, can only sympathize with the player but they truly do not understand what they are going through. I say that because the athlete is battling their inner-self.

The consistent thought of not being the same person you were or just plain giving up because you think you are done looms overs the mind of those injured. These are factors that affect the basic athlete's psyche. There are others who defy all odds and come back better than ever. Adrian Peterson, former running back of the Minnesota Vikings, pulled of one of the greatest comebacks in history by tearing his meniscus and returning the next year to fall nine yards shy of the season rushing record. Peterson went on to win Offensive Players of the Year, Most Valuable Player, and later won ESPY's Comeback Player of the Year. When this career-ending injury occurred, analysts said that he would not be the same "A.P." that we saw terrorizing defenses. Some even

said that his career was done, and he should hang it up. He ended up shutting up the critics and continued to build on his legacy.

In order to grasp a clear understanding or view as to what happen and why, there are a few things that someone needs to know. First, no one really understands what happens at this stage in an athlete's career. They might have seen movies or read novels that speak about this, but they never get the full detail of it. Second, to my knowledge there are not many that have chosen to explore this sensitive topic and really give full details about what happens in these situations. Finally, my love for being an athlete is strong and I have been in this situation before. My injuries have not been as severe, but it came at a crucial time in my career. So, I felt the way that some of these athletes have felt.

The injuries you can expect to learn about in my paper are concussions, shoulder and quad tears, ligament tears, and broken bones. I chose to go with a wide variety of injuries and not just limit to one various reasons. For one, there are multiple injuries that have their own effect on the body that play as major of a role than any other. Second, focusing on one, such as the knee ligament, would not give the full run around on what injuries are and what they do. For one to talk about a knee injury would not give insight on why a promising athlete gave up his career because of a shoulder injury. It would be a disservice to you. Lastly, everyone has a different experience when being severely injured. So, for everyone who reads this, they will have the ability to critique this paper. Whatever they see is false or untrue they will be able to challenge my research and tell what about my paper is not accurate.

Going through several injuries I will not be able to give a full coverage of each injury but the full detail of what happens will be discussed. With these five injuries you must first know what happened to the athlete for this to occur.

First, concussions have silently made their way to be a major priority in multiple professional sports. As most already know a concussion is a mild traumatic brain injury where the brain is thrown against the wall of the skull. While making impact the brain can move at different speeds which can cause different parts of the brain to wear and tear. The injured brain can worsen the concussion by other injuries in that general area. To add on to bad news that come with a concussion is that the blood flow to the area is slowed. That means the nutrients and oxygen that are traveling will take a hit and will slow down the recovery process.

Second, a shoulder tear, formally known as a rotator cuff tear, is what doctors would call a common injury. This is very common in sports such as baseball or tennis. So why is this a career-threatening injury if it is so common? There are two different types of rotator tears: partial and complete. They are both self-explanatory and still dangerous. After tearing your rotator cuff the first time, it is expected that the majority will try to come back from the injury and look to perform. But, once you have been injured you are susceptible to that same injury. After rehabbing some feel as they do not have the same skills as they did before. Even though this is considered a common injury in some sports, some athletes could start to show discomfort or even have pains in the shoulder area. This is in turn would cause some to quit or retire on the professional level, so they can stop before it worsens.

Quad tears a little less common and are more serious that rotator cuff tears. They are more likely to happen in sports such as football and basketball. The reason for that is because the injury occurs when there is too much load on the knee and you land awkwardly. This is a scary injury because if it a small tendon tears can bring discomfort to walk or even keep you from participating in practices or team activities. If it is a large, or complete, tear then you could be looking at demobilization and surgery. Just from this, there are numerous athletes who have torn

their quad and contemplated about retirement. This injury is dangerous and could potentially lead to further discomfort when the athlete's playing days are over with.

Next, broken bones have always been a killer to any athlete because just from that instant you know your season is over with. That is a hard thing to deal with especially if it is your last year playing or it is the beginning of a new year. It also makes the athlete think that they are done, and their careers are over with. This is the emotional aspect coming out because most psychological stress occur after MRIs or X-rays but with broken bones there are some who know right away that it is bad. Whether it be a broken arm, a broken leg, or even a broken wrist some broken bones will heal, and things will go back to the way they were.

They also take a toll physically and mentally. Of course, it is a physical injury but look at the aspects of it as that bone might not reform to its original state and might cause discomfort for the athlete. This is where the mental side comes in. After surgery and rehab so athletes feel as if they are not as fast or as strong and they decide to quit. Broken bones are a serious injury because sometimes your livelihood depends on your recovery.

Finally, the knee ligaments have become so influential in today's training with athletes. The reason for that is because it is now so common for an athlete to retain some type of a knee ligament whether it be a sprain or tear. Today's workout regiments aim to build strength in the knee so that one's career is not over like it once was decades ago. Injuries such as these can be caused by blunt trauma to the knee, a sharp change in direction, or landing wrong from a jump. These can occur in sports like football, basketball, hockey, tennis, or even baseball.

Of course, you can include soccer in the mix since it is a sport that only uses its legs and feet. Even though, athletes tear their knee ligaments and come back to their sport more alive than

ever sometimes, a ligament tear is still considered a career-ending injury despite the technology we have today.

Interview

Researching for about athletic injuries is the basic and most common way to go about writing this paper. Research can only do so much, so I went and interviewed third people who all have different perspectives of what goes on during an injury and its recovery process. The three people I interview were an athlete with previous injuries, a seasoned athletic trainer, and an up and coming strength & conditioning coach who has seen his fair share of injuries. All three interviewees are all apart of Murray State Racer Athletics and Murray State Racer football.

My first interviewee is Ernis Kenty who is a redshirt freshman Free Safety for the Murray State Racer. The reason I chose him for this because when we played together, Kenty was sidelined for his first year because of injuries. He agreed to do this interview because he wants to encourage others and tell his story in the process.

Me:

How long have you been playing football?

Kenty:

I started playing Pop Warner when I was five years old.

Me:

Have you recorded any other injuries that are as severe?

Kenty:

I had open-mouth surgery. It happened from diving for a ball and my chinstrap caught the inside of my mouth and it ripped apart of my mouth out.

Me:

What happened in both of your injuries?

Kenty:

a) I was training for 7-on-7 and I jumped for a ball and when I came down my knee buckled. I heard it pop 3 times.
b) While in fall camp during one of our scrimmages I jumped over a pile of players and my knee buckled again. I knew something was wrong and it felt like more than just my ACL.

Me:

What were you feeling when it happened?

Kenty:

a) In my mind I was hoping I just hyperextended my knee.
b) I was in disarray because it did not just happen again, but it felt much worse than before. I was uncertain of what was to come next.

Me:

What technically happened to your knee?

Kenty:

a) Talking to the doctor for the first time, he just told me that it was just a torn ACL.
b) The second I went to the team doctor and he told me I had a torn ACL. I had my doubts, so I went and researched him and discovered that he had never done a reconstruction of a knee. I went home to St. Vincent Hospital in Birmingham, AL., to get a second opinion about it. The diagnosis was that I had torn my ACL, LCL, MCL, and partial of my meniscus. My doctor, Dr. Lucas, was the one who performed the surgery.

Me:

Psychologically, what were you feeling?

Kenty:

a) I knew I could bounce back. I knew I had to comeback because I needed to keep the interest of college coaches and still be able to receive scholarship offers.
b) The second time I felt uncertainty of my comeback. I started to doubt God and I questioned, “Why is this happening to me!” I know I did not come cause trouble off the field. I was a hard-worker. I did the extra reps that it took to get better. But still it happened, and this was worse than before.

Me:

What was going through your mind through everything?

Kenty:

a) There are types of mindsets that you experience when dealing with a ACL injury:

1. Immediate impact- I have already explained earlier what mindset was.
2. The diagnosis- Again I explained what I was feeling and thinking.
3. "ACL Horror Stories"- I would hear people talk saying, "That is the worse injury an athlete could experience." People would tell me "I would not wish that on my worst enemy." Over time that has become my favorite quote.
4. Overcome the Pain of Surgery- I had to learn how to be patient. I also had to learn to endure the pain. It was the worse pain I ever felt in my life.
5. Therapy- Patience was my best friend again. Therapy played a major role in me gaining confidence again.
6. Running and Cutting- It felt as if I was learning how to walk again. I gain more confidence everyday with this too.
7. The Big One (returning) - In this stage you must overcome the fear of it happening again. You must block out the fear of others thinking it will happen again. I had to build my confidence in the process that I endured.

b) It was much of the same as I explained before. The third stage was the same as before but statistically the likelihood of me recovering decreased tremendously. For the fourth stage this time the pain felt more like Hell. Everything was increased: the pain medication and the amount of depression. The therapy was more painful, and it was more difficult because of the back-to-back trauma my body experienced from surgery. Then I had to build even more confidence in running and especially with cutting. Fear attacked me sooner than expected. Fear at the beginning but I realized this was the climax of my life

story. This is where my life changed on and off the field. My mindset went from “Why me” to “Why not me.” My faith in God became unbreakable because he kept me through it all.

Me:

How has rehab been?

Kenty:

Rehab has been so much easier now. It went from coming back from an injury to maintaining good health.

Me:

What has been your mindset?

Kenty:

My mindset has just been becoming an inspiration to others that have experienced or are experiencing what I went through.

Me:

Do you feel like giving up? Or did you?

Kenty:

Both time I felt like giving up but the realization is that more people would be effected by my success or by my downfall.

Me:

When will you return to the field?

Kenty:

I already have.....I am not my old self but every day I am getting better.

Me:

Any final remarks about what happened and what it did for you?

Kenty:

This process came at a pivotal time in the developmental stage of my life. It taught me that the world will not stop for you just because your life goals are put on hold. It also taught me that no one can do you better than you can. I used the tactics I learned to overcome this stage in my life, to overcome any milestone ahead of me.

My second interview was with John Clay who is the new Strength and Conditioning Coach for the Murray State Racer football team. He is relatively young for this job, but he has gained much experience since he started. Clay has seen his fair share of injuries and has his own experiences with them since he is a former player.

Me:

How long have you been a Strength Coach?

Clay:

I have been a strength coach for six years. I did three at Samford, two at Colorado State, and half a year here in Murray.

Me:

What all injuries have you seen?

Clay:

Well, I have seen ACL tears, torn labrums, tendonitis, and a fractured patella. There was a guy I played with that ended up having nerve damage. He needs to have some type of support because he does not have any control in his foot. Also, guys that I played with and coached have gotten dislocations, herniated disks, and ruptured Achilles.

Me:

After a player is done with rehab, what is there process with you?

Clay:

Once I can get the green light from the training staff, I usually start them with the basics such as something that they are used to. My job is to increase the intensity of it so some strength can come back.

Me:

Do you focus on other parts of the body when a player who is injured is working out?

Clay:

That is the focus at first. Once Fulton, the athletic trainer, works on what is hurt. I focus on everything else. Then when get the "ok" that is when we go to work.

Me:

Hypothetically speaking a player tears their ACL. They have done everything with the athletic trainer. Can you take me through the different stages of returning to 100%?

Clay:

It's all based on Fulton. We will go off the doctor's protocol. When the training staff gives them to me, I can work with them on what I deem fit.

Me:

Have any injuries affected you psychologically?

Clay:

No not at all. I feel bad for them. I go back to see in the program what I could have done for him so that he could be stronger. Sometimes it's just a freak accident you can't control.

Me:

Any final remarks?

Clay:

When people get injured they tend to try to isolate themselves. That is why as soon as we can get them back I want them to be involved. I do not want them to first be around then stray away from everyone else. Just by looking at them you can see their demeanor change. One thing I like to say is "The goal of what I do is to minimize injuries. I cannot prevent them, but I can minimize how many there are at the end of the season."

The last interview was with Fulton Hart who is the head athletic trainer for Murray State Racer athletics. Hart got his master's at Southeastern Louisiana University then he went on to do a practice with the New Orleans Saints. In the year of 2007, Hart came to Murray, KY to become the head athletic trainer for Murray State. He has been here since.

Me:

When an injury occurs what do you first look for?

Hart:

Make sure they are still alive. I go to check their heart rate than anything of that dynamic.

Me:

What is the most gruesome injury you have dealt with? What happened?

Hart:

I have not dealt with any that are just gruesome. I find them challenging. I remember at a basketball cam I worked a girl broke her tibia and her fibula. Her foot was pointing in the wrong direction. Another one that comes to mind is there was a cheerleading camp and a girl broke both

her arms. Like I said before they are not gruesome they are just challenging and it is a long process with injuries of that sort.

Me:

Can you tell if an athlete's injury is severe from first glance?

Hart:

No not really…. if I watch it happen in real-time then possibly. But majority of the time I cannot tell if it is severe.

Me:

How long do you wait to start rehab?

Hart:

Depending on the injury…ideally if it is soft tissue then right away but something major like broken bones then that could present some problems.

Me:

Do you tend to be passive or aggressive with certain injuries? Why?

Hart:

That is an injury specific question. Some you might be aggressive and some you might be passive with. Going back to the literature, the case studies, the reports that we know of, and what we have been taught helps us understand what to do with the injuries we are dealing with.

Me:

What all goes into the treatment process?

Hart:

So, no two injuries are the same. Something as simple as an ankle sprain is unpredictable. First, you would want to start with 72 hours in cold, to stop the inflammatory process. Second, we start

with gentle ROM (Range of Motion) work. This is when scar formation begins. Lastly, we get into the basic rehab we all know and have seen. You never know with ligaments, even with an ankle sprain. A full recovery could possibly take up to three months. Things of this nature are delicate, and they have to be taken seriously, for the athlete's sake.

Me:

Do you think having more up-to-date facilities would help?

Hart:

No, we have everything, we have access to everything, they probably have some nicer things but those are not really needed. An ice bag is an ice bag no matter where you get it from.

Me:

Is there anything that you think would benefit you when treating athletes?

Hart:

No not really.

Me:

From what you have seen has there been any psychological effects or mental strains on the athlete's post-injury or after rehab?

Hart:

Of course, they must go through the grieving process. It is as if they are losing someone special. Especially for those who are long term because they look to isolate themselves. There is a process of grievance, then acceptance, and finally moving forthwith things. Eventually the end goal is to get them back to the person they were before.

Me:

Throughout all your years being an athletic trainer have the injuries gotten to you in any type of way?

Hart:

No…there are times you feel bad for them. You feel bad for those kids who put in a lot of work. For instance, a 5th year senior comes back to finish up and on the 1st play he tore his ACL. It does not get to me, but I sympathize for them. Its jut tough seeing all that work and they are not able to showcase what they can do.

Me:

Any final remarks regarding injuries and treatments?

Hart:

No. God Bless

Intricate Details of Injuries

As everyone knows, interviews can only do so much when explaining what happens with an injury. There are so many injuries trainers that trainers cannot just go off mental notes, especially major injuries that we are discussing. Next, all the injuries that were stated before such as, broken bones, ligament tears, and other tears to the body. But, there is one injury that was discussed earlier that is not like the others. It is not like other injuries when you can surgery and have rehab and everything will be ok. That injury is concussions.

Concussions

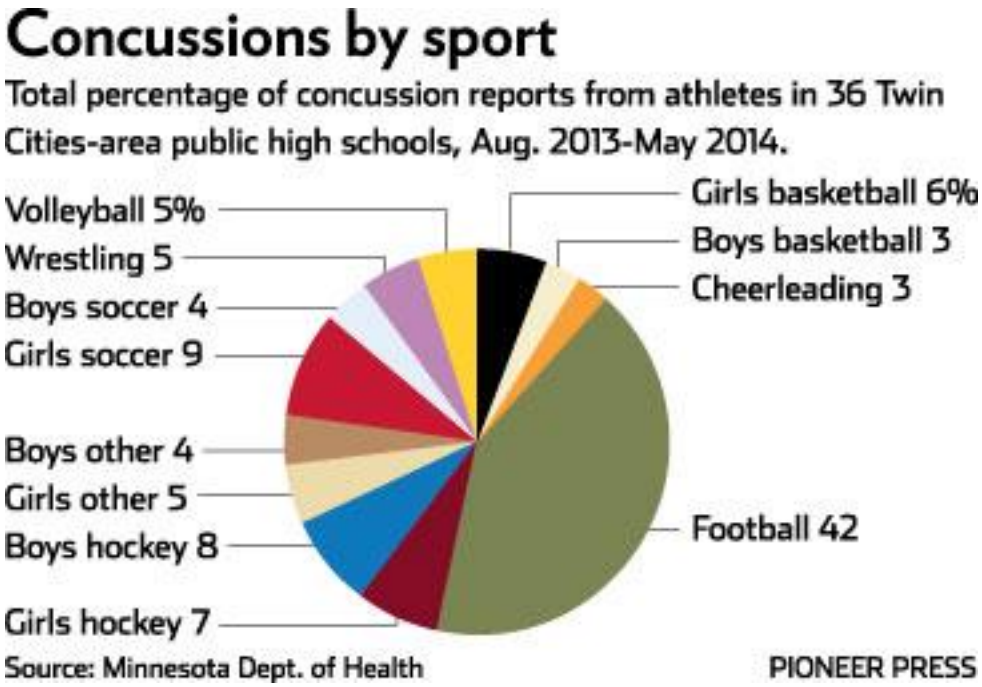
Thirty years ago, if you took a big hit and you were seeing things and your vision blurred then you would be told “stop whining and get back out there!” A lot has changed since those prehistoric times. Since former athletes dying from head trauma or even current players who

have killed themselves have declared to have experienced head trauma. Concussions have become a top priority in majority of contact sports. There are protocols, evaluation tests, and even punishment to those who endanger others during the game. The movement to better understand this and help prevent them is stronger than ever before. There is a movie with actor Will Smith called “Concussions” that has brought more awareness to our minds than it did before.

When talking about sports, every sport has its general injury that is very common and then you have those that are unique to the sport. One general injury that are underrated and are under the radar are concussions. A concussion is best described as a post-trauma impairment of the brain after a severe impact to the brain. Most people question when they played competitive or recreational sports, “Did I have a concussion?” Most common symptoms to display for a concussion are: blurred vision, unable to keep your balance, the inability to move, or a change in

your conscious state. Also, a very common giveaway that you or your companion has suffered a concussion is short-term memory loss.

Prior to the twenty-first century, the definition of a concussion was if you were unconscious or if you could visible not function. That is where the phrase “have them seeing stars” came from originally. Because of the way we once viewed concussions and any other brain traumas then. Some clinic doctors claimed what is a little impact to the head just to be a “ding.” Just this mindset alone, there are not any concrete date to go off because of the carelessness for this subject. To begin recording statistics, there must be a clear definition of what a concussion is and based the data off that. Otherwise the data is not tangible in any shape or form.



As shown in the graph above, football, obviously, leads the percentage in concussions by sports. That is for a many of things. Boxing is not included because of what the sport’s main purpose is. There are several reasons as to why football is a large percentage and is nearly half of the pie. The reason being is that there are multiple collisions that occur that during just one

football play let alone during the duration of a game. Head-to-head contact will be displayed by many players just because of their position they play on the field. But now that there have been discoveries about concussions and what they cause the brain, more rule changes are occurring because of this. For instance, the rule known as “targeting” is when a player tries to cause contact near the head region of the body. Now some are unintentional and are just accidents but there is the slight percentage where their hits are intentional.

The new issue that has been discovered with concussions is CTE. Chronic traumatic encephalopathy is a series of blows to the head that cause degenerative brain disease that can lead to the killing of brain cells. Ultimately, if given enough blows or if it spreads then it could lead to impairments of the body or even death. With more stories and new research being revealed, the concern for athletes has increased dramatically. Especially, since the reports of former NFL players are dying and suffering from this disease. From this across the United States, athletes, especially football players, have given up their sports because of this. Also, more and more parents are taking their children from sports but will let them participate at a later age.

New research that has been published shows that concussions does not cause CTE. In fact, it is the vicious hits that occur during the sport that cause CTE. The research showed that less than forty-five percent of athletes that have shown some form of brain injury have never recorded a concussion prior to the test. When the head injury occurred the tau proteins that were traveling throughout the brain would end in one part of brain tissue. That then would lead to inflammation or overload in one part of the brain. This is where you get symptoms such as dementia, mood changes, and then the key indicator aggression.

There have been talks on how to improve sports for the athletes so that no one can fall victim to CTE no more. Rule changes in football now make it illegal to “target” a player and

could result in suspension and a fine if you are dealing with professional sports. Other sports like soccer are starting to take headers out of the game help reduce the risk of this or a concussion. Boxing or UFC, on the other hand, cannot be altered to best help the athlete because the main objective of the sport is render your opponent unconscious. Below is a photo that is both concerning and disheartening because there is little to do about it.

The image above serves as a notice as to what can happen when this issue is not taken seriously. The image on the left is what the normal, typical section of the brain looks like. The image on the right is what stage IV CTE looks like. As stated before the studies and data we already know about this topic is inaccurate. So as for now, little can be done with the topic of eradicating CTE. All we can do is try to prevent it or control it. As spoken before, sports are already doing what they can with the rules to provide security for them in the field of play. This also brings into play the equipment used for each respective sport.

With protection being the number one concern in sports, companies that make sports equipment are doing everything possible to ensure the athlete's safety too. The equipment go

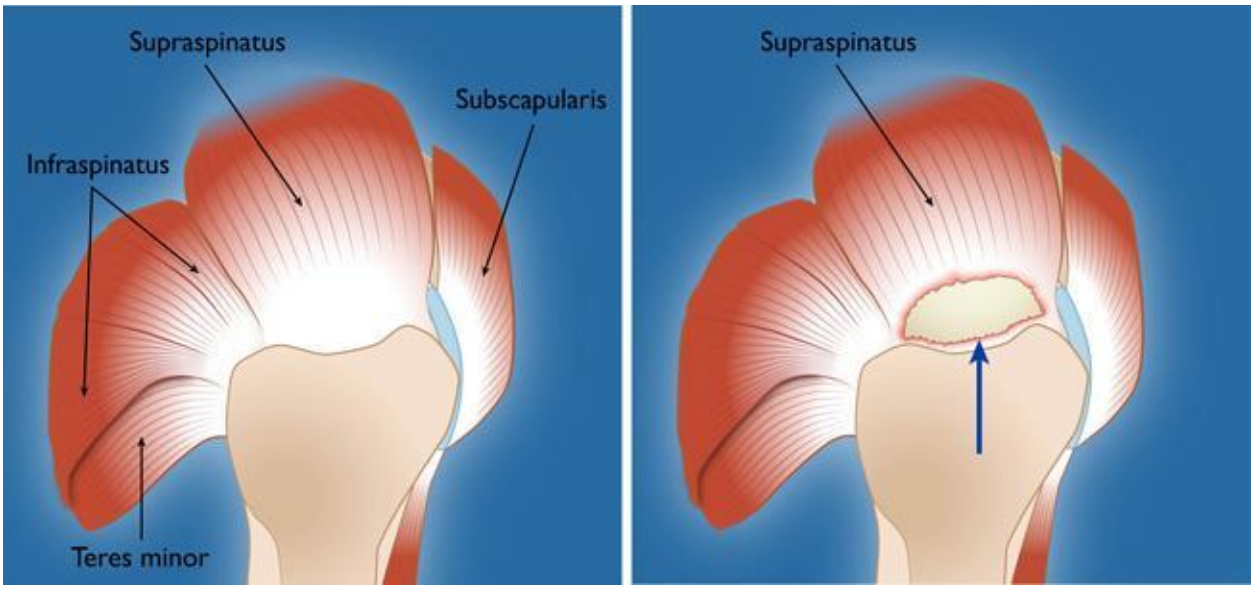
through strenuous tests and get refurbish every couple of years to start up to par with safety codes. With the rule changes and equipment changes coming into play, it all seems that it's getting better but it just does not stop there. Coaches and trainers are just as accountable for the protection of their players. Not being considerate for their safety and just saying "you are fine" will not do. Especially, if that child ends up dying because of their actions. If a player does end up developing a concussion or is having head problems he or she should be regularly monitored, for their safety.

Shoulder Tear

A shoulder tear or otherwise called a torn rotator cuff is best explained as the tendons that connect to the humerus are no longer there. When the rotator cuff tendon is damaged a sac called the bursa, which connects the rotator cuff tendon and acromion, becomes inflamed. This is significant because the bursa lets the rotator cuff tendon move around freely without any problems. This has been known to be a common shoulder disease, which is described, but it does have a negative effect to it. After you tear your rotator cuff, your shoulder begins to weaken. So, after several tears your shoulder might not be able to function properly like it once did. Daily actions like reaching for an item above your head, doing your hair, or tossing a ball will become painful.

The anatomy of the shoulder is that of a ball-and-socket joint. It consists of the humerus, the scapula, and the clavicle. This is where the rotator cuff tendon comes into play. The rotator cuff is a group of muscles that connect all three bones together and give the shoulder the ability to lift and rotate. As said about in the previous paragraph, the bursa helps the arm move freely without any type of restrictions.

When dealing with rotator cuffs, there are two types of tears: partial and full-thickness tear. There are four muscles that make the rotator cuff and they are: supraspinatus, infraspinatus, subscapularis, and the teres minor. Ordinally, most tears deal with the supraspinatus tendon, but more can be involved. It all depends on the incident and how severe it is.



A partial rotator cuff tear is what is called self-explanatory. It also referred to as an incomplete tear. It is a damaging tear that still has threads connected to the humerus but is still painful and very hard to cope with. A complete tear, which is shown above, is where the muscle fiber is disconnected from the humerus because of some type of activity. As the image shows on the right, the tear opens of and it begins to look as if there is a hole there. Depending on the injury and how bad it is, the other three muscles could be torn, and you could possibly lose motion in your arm.

What can cause an athlete to rip a whole in their shoulder muscle? The causes are endless; it could be because of a repeated overused motion or too much weight being lifted or even falling on your extended arm. Athletes that can really be affected by rotator cuffs are

quarterbacks who fall on their arms, weightlifters, baseball players, and throwers in track and field. Basketball players can also have a shoulder tear because of repetitive shooting motions. An acute tear is what happens when all the following occur. What is also significant about an acute tear is that they can occur when an athlete has a broken collarbone or a dislocated shoulder.

Another cause of a tear is what is called a degenerative tear. Over time, whether it be by age or just repeated motion, the shoulder begins to wear down, Hence, the name degenerative. Pitchers, throwers, quarterbacks, rowers, and tennis players all exemplify a motion where the shoulder muscles will weaken over time. This form of degenerative tear is called repetitive stress. For example, a baseball pitcher will at minimum throw twenty-seven pitches during a game, if he is lucky. Then you factor in double headers and triple headers. A pitcher will not play every single game but there are one hundred sixty-two games in a season. This does not include the postseason. If a pitcher goes into his seven year with an organization, he would have already had a torn rotator cuff or would be displaying some version of discomfort.

Being an athlete when feel a type of pain, you go and research what it is happening. Showing signs of pain when lifting an object or feeling weakness in your arm then you have had some version of a rotator cuff tear. The cracking sound when rotating your arm with immense pain are signs that you have a torn rotator cuff and possible a complete one at that. These types of tears not that painful but over time activities that were once simple, start to become more difficult to do.

Once it is declared that an athlete has a torn rotator cuff, treatment or surgery should begin as soon as possible. The longer an athlete goes without getting treatment, the more damage they do to their shoulder. If caught early enough, physical therapy and other nonsurgical

treatments are recommended. This being that there is no evidence that state that athletes return better than they were before.

When treating the issue, the first form of treatment that doctors or physicians prescribe is rest. Letting your body repair itself and limiting activity will help quicken the process. The next best thing will be medication prescribed by a doctor. Painkiller such as, ibuprofen will be given to numb the pain for a short while. While ibuprofen does numb the pain for a short while, an athlete who continues to proceed further without caution will only cause more damage. Physical therapists will show the athlete some exercises to better improve mobility and improve strength in the shoulder region. Lastly, if nothing works or if the athlete is on a short-term then he or she will be given a cortisone shot to help combat the pain and stop inflammation in the shoulder. A cortisone shot is somewhat of a steroid shot to help the athlete push on. In stances like, a team that needs their quarterback to play or a thrower who is trying to make it to the Olympics who must compete in the next competition. Finally, if it is permitted then surgery must take place to help the athlete. As said before surgery is not the best suit for this.

Like all surgeries, rotator cuff surgery is also risky. The chance of infection is still high and the risk of stiffness in the arms is high. Also, recovering from surgery could take longer than it was originally projected. There is no telling what how the body will respond to the man-made repairs. The body could cooperate, and recovery time will be quick. It could also take time and the athlete could be out for months at a time, maybe even a year. When athletes get the notice that they have a torn rotator cuff, they look to surgery as a solution. Sometimes surgery is not always the best solution because it cannot make the situation better.

When the athlete is feeling pain, a MRI say there is a shoulder problem but that might not be the source of where the pain is coming from. There have been cases where surgery has taken

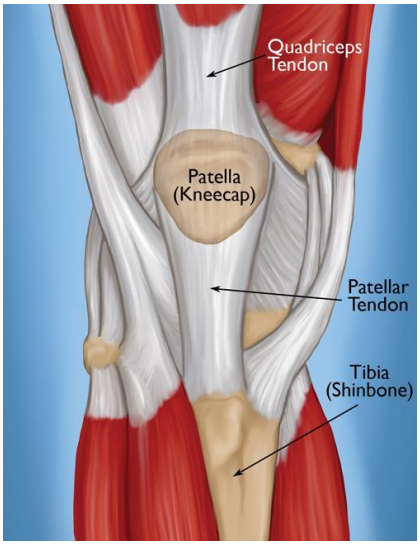
place, but the athlete still does not have a full ROM and pain is still lurking in the region. Some doctors assume that the pain is a cause of rotator cuff but that is not the case. Research done by several doctors concluded that pain that athletes would experience came from an inflammation in the ball-socket-joint and not from a tear. The pain came more from inflammation in the joint fluid rather than from the rotator cuff. Also, a remarkable find is that an athlete could have a complete tear to his or her rotator cuff but will not show symptoms the slightest bit. Shoulder pain and tear can be connected and sometimes are, but the real issue is inflammation build up.

There is was a new study developed to look more into rotator cuff surgery and the after effects of it. Data recorded showed that participants in recreational sports returned with a high level of play, the same could not be said about professional athletes and their return. The records showed that only half of competitive athletes came back with the same level of play that they once had before. So, if you were an athlete who just had rotator cuff surgery to fix your aches and pains, you will have a fifty percent chance of being that player you were before it all went downhill. If an athlete was to read or be told this information, what would be going through their minds?

A rotator cuff injury is common amongst people and it is not a major problem. For athletes it is an injury with time can be okay. After research and conclusions, an athlete's chance of being great again are not in their favor. Even without the data, an athlete knows if they are not at their full potential and that is discouraging. Especially, if the athlete is trying to keep a job or they are trying to get a scholarship, the mind will take over and tell them that it is over. This is where psychological aspects come into play. Why go and deal with shoulder pain for a long time and you will not be able to benefit from it? That is a mindset that they deal with. That is why some give up so early, so they don't have to deal with the failure.

Quad Tear

There are four muscles that sit onto top of the patella to make of the quadricep muscles. They all work in conjunction with quadricep tendons and the patellar tendons to help straighten the leg when needed. The main job of the quad is to help with running, jumping, and kicking. That is why it works with the hip joint, so there is flexion and extension. The femur bone plays a large part in the anatomy of this.



A quadricep tear is an injury that is a painful but also a lengthy one which could be costly to an athlete. The tendons in the fiber tissue connect and stabilize the muscles attached to the bone. Small tears can cause pain and make it hard for an athlete to move let alone keep playing. A larger tear would cause serious issues and sideline the athlete for an extended period. It is seen as a crippling injury and would require surgery and extensive rehabilitation to gain full control again. As said before in the previous paragraph, the quad, itself, keeps all functions going in the body.

A quad injury usually involves some type of kicking, jumping, or a sudden change in direction. This is significant to another injury, but that type of injury will be discussed in due time. Soccer is the sport that comes to mind when discussing this topic because the duration of a match is ninety minutes with a half time at forty-five minutes. There are frequent times within the match where an athlete will display all three movements in a short period of time. A quad injury can occur if the athlete is not properly warm and is still considered “cold.” Jumping right into a game without warming up is considered a way to rupture your quad.

Soccer, of course, is not the only sport where most players can have this injury occur or an injury of that same nature. Basketball has had its fair share of athletes fall victim to quadricep tears. Carlos Boozer, who was a forward for the Utah Jazz at the time, suffered a quad strain during their campaign in the 2008-2009 season. Boozer ended up missing forty-four games in the season because of this and had season-ending surgery after all. He ultimately ended up missing half of the year and then playoffs because of this injury. Boozer ended up getting traded not too long afterwards because they felt that he was not contributing to the organization.

A quadricep tear breaks down into two categories. A partial tear would be considered a sprain since there is no tissue being torn. It is stretched to the point where it is worn out, but it is still connected. A complete tear, like any other tear, is the severance of the tissue from one another. When this happens, the tissue is no longer attached to the kneecap and this makes it impossible for the leg to straighten. Therefore, surgery and rehabilitation are needed for a return that could have a player sidelined for months.

Before a tear is diagnosed for what it is, doctors and trainers go through a grading scale on the severity of the strain. The scale goes from one to three. A grade one strain is just a slight pull or tear on the muscle, but play is still an option. Depending on the sport and the player, he or she can still play through the discomfort and still be productive. Grade two strain is a moderate feel of pain and loss of strength. Athletes who are willing to put their body on the line, will still try to play but majority will sit out and look toward the future. A severe tear or Grade three strain is a complete tear of the muscle fiber where there will be extreme pain and the loss of muscle strength. Surgery is required for this strain and the athlete will be out of commission for several months.

The image shown is a photo of a complete quad tear. This is when the quadricep tendon snaps loose from the patella and the patella is no longer

connected. As seen on the right, the fibula and tibia are in direct contact with the femur. The x-ray given shows that the kneecap is dislodged from its original position. By looking at this image there must be surgery and the recovery time for this could be several months. This is not including therapy which occurs several weeks after therapy. The recovery time from all this could take a span of four months at minimum to up to a year.

The causes of these tears can come from heavy loads on the knee, a weird landing from jumping, and quick cuts that also put pressure on the knee. These are the more conventional way of tearing a quad. Tendinitis, which is an inflammation within the tendon, wears down the tendon and eventually small tears begin to appear. Tendinitis is formally known for being in track athletes and basketball players, but any athlete is susceptible to fall to tendinitis. Next, diseases such as, gout or arthritis, diabetes take away from the surplus blood to the muscle, which lowers the strength of the muscle. Other ways are through steroid use, antibiotics, and prolonged rest which wall take away strength from the tendons.

When an athlete has suffered a tear, they have two choices that they can take. If the tear is mild or moderate the athlete will be in a straight-leg brace to immobilize the knee. He or she will be in the brace for three to six weeks. Afterwards, therapy begins and the training to get the leg back to full strength as it once was. The main objective is for there to be full range of motion with little to no pain possible.

Surgery is a must for a grade three quad strain. The earlier the surgery can be done, the better chance the tendons and the muscles have at strengthening on with repair. By having early surgery can help prevent scarring and the shortening of the tendons. This means that there will not be any abnormalities after the tendon is done healing and the athlete can resume without any problems. The complications of having this type of surgery are more concerning matters than any others that were discussed before. For instance, there is always a chance that there will be a re-rupture of the quad. Another problem associated with surgery is that the kneecap has a possibility to be in a different spot that it once was. Other complications consist of blood cots and infections.

While an athlete's return to their respective sport with no problems, over half have been recorded to have some type of weakness at the point of the tear. The athlete will be on a watch list just to see if any swelling occurs in the leg. The athlete will not be able to participate again if they are not able to keep their balance and it is as somewhat strong as the uninjured leg. The surgeon has a huge say at the end of the day, of when how soon an athlete will be able to compete once more.

A quad tear is scary business because of there is uncertainty around every corner. When it happens, there is a chance of complete immobilization to the leg. This could be an athlete's status for several months at a time. A lot can happen in that time span like for any other injuries

but this one is different. It is not that common and the risk of your body changing is great too. This is a career defining moment where an athlete will give up especially if they are in high school and are trying to make it to the next level. There is a percentage that would come back and be better than they ever were. Post-injury and post-surgery, the athlete's mind is wondering what they will do now that this happens, and they are wondering what is next. From the immense pain to being immobilized to the possibility that you will not be as fast or strong as you once were, no one can blame him or her for no wanting to be an athlete anymore.

Broken Bones

What is there to say about broken bones? The injury is basic self-explanatory, and everyone knows that there is intense pain when it occurs and after. They are usually season-ending injuries, but there are some where the athlete can come back that year. Few people try to play through the injury but do not know they can cause further damage that what was caused beforehand. There are those that are very rare that are just complete career-ending injuries. Depending on how severe the injury and what type of fracture it is, there is a chance that he or she will not be able to return. Some cases, they will lose movements in their body or they will not be able to walk again.

As I said in the last paragraph, there are different types of a fracture. First one, is a stable fracture where the point of the fractures is barely out of line. Stable fractures are a simple fix and with proper rest the athlete will be able to return in due time. Second, open fractures are fractures where the bone is sticking out of the body and is visible about what happened. These are the most gruesome because at the point in time everyone in attendance of the even can see what happened. This is a time where everyone also sympathizes with the athlete, even the opponents. Third, a transverse fracture happens when the broken bone is more so horizontal than anything

else. Next, an oblique fracture is no different than that of a transverse or stable fracture. The only difference is that an oblique fracture is at an angle. Finally, comminuted fracture is probably the most intense fracture of them all. A comminuted fracture occurs when the bone not only breaks but has shattered into smaller pieces. This type of fracture can cause the athlete to be out for up to a year if not two years because of how severe this injury was.

A broken arm is injury where there is much concern for what happened, but it is an injury that athletes will make a comeback, and they are usually not affected by it. Like any other broken bone if it happens more than once then there is a problem. There are different athletes that when they suffer a broken humerus, they are motivated to come back with in a short amount of time. Earlier this year there was an athlete, named Paige VanZant, who broke her arm during her fight.

Paige VanZant, a UFC women's cage fighter, was in the middle of her fight when things took a turn for the worse. In the second round, VanZant tried to take her opponent by surprise and hit her with a spinning back fist. Her opponents blocked the move and, in the process, VanZant arm had been broken. She continued the fight despite being down an arm, but everyone on her side was fully aware of what happened. The picture right above is VanZant when she went to the hospital and had her X-rays done. She is hoping for a speedy recovery in hopes to return the sport that she willingly put her body on the line for. VanZant is one those individuals that was spoken about before, that after suffering a fracture, is excited to get back to what she does.

A broken leg is just as serious but is worse than a broken arm. It is seen as an injury that one can regain his strength and still play at his/her top physical peak. It can also be what is described as a handicapping injury for several reasons. Some athletes are tough as nails and still competed through a broken leg. For example, Tiger Woods, during the US Open, not only broke his leg but also tore his ACL. What is remarkable about this is that, Tiger had to fight through ninety holes before he could get medical attention. Another example, a player for the Los Angeles Rams once played a whole football game on a broken leg. That is complete toughness right there. There are those few who cannot make a return and give up.

A player had both his highs and his lows after suffering a broken leg is Earl Thomas of the Seattle Seahawks. While trying to make an interception during a game against the Carolina Panthers. While in the air, his teammate collided with him and snapped his leg on impact. Earl

Thomas was carted off the field, as seen by the picture on the left, and sent his regards through social media to let everyone know that he was safe. Thomas went on later to express his feelings that he contemplated about retiring. Earl Thomas is in the prime of his career, so why would he be thinking about retiring? Thomas is just the one of many who have had this thought role through his mind. He was just lucky enough to be able to return. Some of his counterparts are not that lucky. For instance, Joe Theismann's injury has reshaped the game of football ever since 1985.

Joe Theismann was heading into the peak of what would be a promising career until one game where everything changed. Theismann was the starting quarterback for the Washington Redskins and they were playing their rivals the New York Giants. Theismann had dropped back to pass then suddenly, he was sacked by Lawrence Taylor. He ultimately ended up breaking his

leg. Theismann was carted off the field due to being immobilized after the play. Joe Theismann's career was cut short and he was forced to retire because of what happened that day. Ever since then, the game has changed because of that play. What is significant about this play is that the most important person on a team is no longer a quarterback. It is the left tackle or the "blindside" of a right-handed quarterback. He is one of the highest paid players on the team, so that what happened to Joe Theismann never happens to anyone else. This injury still goes down as one of the most gruesome injuries of all time.

A broken leg is unpredictable. It can revive someone, or it can cut someone's career shorter than it needed to be. Earl Thomas and Joe Theismann are just a few of many who came back and those who could not. There are athletes like Reggie Bush who were going to have a great stable career, but when they returned it was clear that they were not the player they once were. Breaking a leg is a revelation and I say this because any athlete will contemplate about giving up. There is a chance that the athlete could walk with a limp for the rest of their life. Some may feel as if they are not as fast, quick, or as strong as they once were. The effects from this are

great and just to see your life not be the same as it once was. There are those who vow to be better than they ever were.

Your neck is the most one of the crucial parts of your body. During a competition, you have injured your neck. What would be going through your head? You arrive at the hospital and while in your room, the doctor confirms that you have a broken neck. What to do next? Broken bones are one thing, but a neck injury is a whole new classification. This is just not whether you will be paralyzed for life, this is about life or death. There are too many factors to go into when dealing with something as horrific as this.

A broken neck can be caused by several situations. These situations are usually referred as high-energy trauma incidents. Incidents, such as a football player lowering his head into the body of an opponent or a swimmer who hits their head on the bottom of the pool are just a few ways a broken neck can occur. That is why there are so many rule changes to selective sports. In football, it is illegal to use your helmet as a weapon which is called “spearing.” Baseball and softball have also made rule changes to where the catcher can no longer stand in the way of home plate. The reason for this is that when a baserunner comes around third base heading home, he or she does not slide head first into another body. Some of the most intense moments are not when the situation is hyped, but rather seeing someone lie motionless on the ground.

When the realization of what happens, the player will not be moved until the paramedics are on the scene. A brace will be applied to the athlete and they will then be carted off the field of play to an ambulance. He or she will remain in the brace until further instructions or when they receive X-rays. Even though they could two different injuries, a person who is conscious with neck pain will be treated the same as a person who is unconscious on the spot. There are those who might not think nothing of it or just do not care because they are too deeply entailed with

what is happening in the game. That is complete dedication to a cause, but that is also complete idiocy.

One person that displayed toughness and determination was Bert Trautmann. He was a captured German soldier during World War II. After being captured he was sent to the island of Great Britain and never left. His story starts when he became a goalkeeper for the historic Manchester City. During the 1956 FA cup, Trautmann went for a save and broke his neck when collided with the opponent. Instead of staying there and seeking medical attention, he finished the game. With seventeen minutes left, he help preserve the lead for Manchester City by making two more critical saves. After a couple days, Trautmann was told he had broken his neck and if his neck had made another abrupt movement he would have been dead. Even with this information that did not stop him from doing what he loved because he went on to keep playing in five hundred more games.

A more recent occurrence was with Austrian snowboarder Mark Schairer. While competing in the Winter Olympics back in February, Schairer had a horrific fall when landing during a race. He landed on his back and remained motionless until help arrived and then was transported to the local hospital. According to X-rays, Schairer fractured his fifth cervical vertebrae upon impact with the snow. Surprisingly, Schairer willingly went back to finish the course. He has stated he looks forward to coming back to the sport and back competing.

Even though a broken bone is a more sensitive issue, the recovery and rehab for it is very similar to that of any other broken bone. Whatever part of the cervical vertebrae is fractured will determine how treatment will take place. If the fracture is minor than the athlete will be put into a brace for at least six weeks. Now if the fracture is worse than what the doctor considers worse than a minor fracture there will be more procedures. Of course, there will be immediate surgery and then the person will be but into a cast for several months. In some cases, there will be light rehab if it is permitted.

The neck is one of the most crucial points of the body. It is life and death in cases where you see a person lying there motionless. There have been athletes like Bert Trautmann and Markus Schairer who have played through and who are making their journey back to their sport. There are also athletes who have given up after experiencing this type of horror. They decided that their life and family are more important than a game. Not all injuries end with a "happy-ending" like Schairer. There have been athletes who have been paralyzed or killed because of what happened. So, watching a person, a teammate, or even a friend die or become paralyzed can be horrific site. So why do those who are fortunate to just have a brace or surgery go back to the sport that caused them and their families' pain.

If any injury is more than being devastating, nothing compares to a fractured vertebra. This injury is an almost guaranteed career killer. If the impact from the collision does not end your career, the thoughts running through your mind will kill it. For example, Ryan Shazier a linebacker for the Pittsburgh Steelers, suffered a spinal injury during a game with the Cincinnati Bengals. As was talked about before, Shazier put his helmet down trying to make a tackle and the force of the impact went through him. He was put onto a stretcher and taken to the nearest hospital. Luckily, his results showed just some contusion within the spinal cord. Shazier is now

making strides to return to team put it is unsure if he will be back for the 2018-2019 NFL season. Ryan Shazier is one of the lucky few who have had a broken back and have been able to return to the game.

There are thirty-three bones that make up the spinal cord. The spinal cord allows the body to bend, twist, and of course stand. Within the spinal cord are tissues and muscles to help give it protection. There are also gel pockets along the spine to help deal with the impact of untimely collisions. Nerves run intertwine within the spine to relay messages from the body to the brain. Even though the vertebra seems simple it is more complex than what is explained.

Spinal fractures can only occur in three different ways. They can either be pinched, compressed, or torn. Spinal instability can either one of two ways that is either stable or unstable. A stable fracture is considered to be more minor so, only rest and a brace will do the job for this style of fracture. Unstable fractures, on the other hand, will require surgery and extensive rest before they are able to get back on their feet. Majority of spine fractures occur in the lower back region. A small percentage happen in the neck area. That is where you get broken necks as discussed earlier.

There are three different ways to help treat fractured vertebrae in hopes that there is not a sign of paralysis. First use of treatment is a brace. This can help with the keep the spine aligned and helps with the pain of moving by immobilizing him or her. If the athlete has suffered a fractured neck, then a halo ring will be required to help realignment. A second form of treatment is fusion. This is a surgical procedure to help repair unstable fractures. While in surgery a rod, hook, or screw will be put in place to conjoin two vertebrae. The last form of treatment is vertebroplasty and kyphoplasty. Then are used in the intent to help heal compressed fractures. Vertebropasty is where bone cement will be injected to the athlete to help deal with the spinal

instability. Kyphoplasty happens when a balloon is used to expand the vertebrae so that the bone cement can also be injected.

More examples of a careers being altered because of a broken back, are the careers of both Cam Newton and Tony Romo. Both are still successfully quaterbacks in the NFL, but things have changed for them. Newton's career had skyrocketed his first year in the league, but his play decreased the following year. After suffering from a fracture, Newton's play has been great, but he is not able to make that impact he once did when he first came into the league. He continues to play in hopes of being considered a top five quarterback in the league.

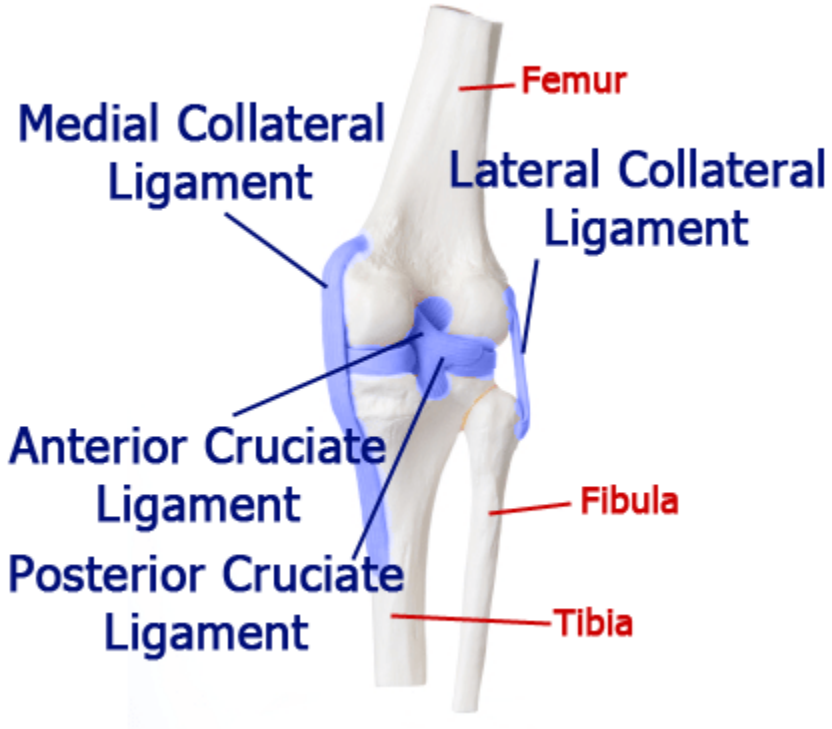
Tony Romo, on the other hand, was not fortunate to do the same. For the past couple of seasons, Romo continued to play even though his back problems gave his little mobility. Two years ago, it all came to an end. During a preseason game with the Seattle Seahawks, Romo went down to slide and he was hit from behind and ended up hurting his back again. His backup, Dak Prescott, came into the game and has been the quarterback since. This injury indirectly "forced" Tony Romo to retire because his days as the Dallas Cowboy quarterback were over.

It is a different injury but almost the same scenarios. Lying there motionless and no one knows if he or she is breathing. The psychological trauma knowing that could have been you or someone you care for. The athletes who have been paralyzed can only dread that day because one more inch in any direction, they could be walking. This could lead to depression, increased anxiety, and who knows what else. An athlete's whole life could be changed because everything he or she once had is now gone.

Knee Ligaments

During the pioneer ages of sports, injuries like knee ligament tears were rare and considered to be career-ending. This day and age, that perspective has changed completely. The occurrence of this ligament tear is becoming like an everyday injury such as a dislocation or a sprain. An ACL tear has now become the flagship for all ligament tears. From my interview with Ernis Kenty, he told us his story about happened with his ACL tear. ACLs are not just the only ligaments to be torn, but it is just one that scares most athletes.

What are knee ligaments and why are they so crucial to the body? It is very tricky to diagnose what is the problem, let alone treat it. They are a band of strong fiber tissues that connective bones and joints within the body. Their main function is to allow certain movements with the knee. Therefore, there is permanent damage to some of the knee injuries that can be received during play.



There are four ligaments that keep the knee that connect the femur to both the fibula and tibia. The four ligaments are the:

- Anterior Cruciate Ligament (ACL)
- Lateral Collateral Ligament (LCL)
- Medial Collateral Ligament (MCL)

- Posterior Cruciate Ligament (PCL)

Each ligament has its own responsibility, are treated in different forms, and have different ways that they can be damaged. The ACL, for instance, is the most known ligament out of all the four. The reason being is that it is the most common one to become injured. The PCL is a very rare tear but occurs when the knee has hyperextended too far. With a PCL tear, the athlete will hear a pop in their knee then start to feel instability. The LCL accounts for the least amount of knee injuries with only two percent being it. Scenarios of a twisting of the knee or taking direct contact will usually cause this injury. Finally, the MCL tear can occur when there is blunt trauma exerted on the knee. This can be a slide or someone throwing their body at their opponents. The knee also consists of a medial and lateral meniscus.

Even though a meniscus is different from a knee ligament, it still plays a significant role with the knee and what happens. That means when an injury happens to the meniscus, it is possible that a knee ligament is involved. The meniscus is a shock absorber for any force that is applied to the knee. A meniscus tear can happen in two different sides of the knee. The medial meniscus tear occurs inside of the knee, while the lateral tear happens on the outside of the knee. Athletes who have had a torn meniscus will have some type of permanent damage whether it be minor or major.

The image on the left is of Robert Griffin III or known as RGIII. Griffin was like Cam Newton, he had an exceptional rookie year. Everything changed for him when his second year came. Griffin was dealing with injuries all throughout the season, but when the NFL playoffs came around it went downhill. He had already torn his meniscus the previous year, then the next year he tore his ACL diving for a fumble. These injuries kept Griffin on the sideline for the next year then he was released. He had a short stint with the Cleveland Browns but because of injury, once again, he was cut. His ligament tears have cut his career short and has given him the label as a liability. After several seasons the Baltimore Ravens have given him a chance, but his knees are still considered a focal point for him.

Another quarterback whose career was halted altogether was the famous Daunte Culpepper. During the early 2000s, Culpepper was bringing havoc the NFL with his ability to both run and pass. He was considered a player who God-given talents like his counterpart Michael Vick. At the peak of his career he destroyed his knee by tearing his ACL, MCL, and PCL simultaneously. Culpepper attempted to live out the rest of his career, but it was easily seen that he was not the player that he once was. Culpepper's stature if he was able to finish his career without the knee injury, his name would have been in the mix with both Tom Brady and Peyton Manning.

A ligament tear, like any other tear, has three different variations that can occur when the impact of the knee is too great. There is what is called a mild grade I sprain, where the ligament is overstretched. This could also lead to a repeat of another grade I sprain, or it could possible lead to something worse. Moderate grade II sprains involve swelling and bruising. The ligament has a slight tear and there is slight discomfort for the athlete. Using the knee joint would be challenging. The severe grade III sprain is a complete tear itself. Swelling will be present and internal bleeding is more than certain to happen. There will be a popping sound because all fibers and tendons will be severed after impact.

With each sprain there is a way that it must be combated. A grade I sprain requires rest, ice, and exercises to help quicken the recovery process. The athlete should return within the next couple of weeks. Grade II sprains have some version of a slight tear but not a complete one. A brace will be given to help keep the knee stable and avoid the leg from over extending. Electric therapy is a form of treatment that will help with the healing. Just like a grade I sprain, to full recovery will take six weeks. The pain from the joint should reside by the end of the six weeks. For a grade III sprain is a complete tear, so treatment for this will be postponed until after surgery. A hinged brace will be needed to reduce any stress that is placed on the knee. Even with extensive rehab it will take several months to return to the sport. This is not including the months spent on recovering from surgery.

When treating a knee ligament injury, whether it be mild or severe there is always a basic process to follow. First, resting the knee will be the most important step because this give the body time to start repairing itself. Second, it will be to ice and compress the knee to keep it from swelling. Third, elevation is key because this will help blood circulation flow better with the athlete’s leg. This will help speed of the repairing process. Eventually, the athlete will start back

stretching then going on with his or her daily physical therapy exercises. Painkillers and a knee brace will be given to them. These four steps are simple, but it will be months of continuous rehab before the athlete can walk let alone go back to everyday life.

From being career-ending injuries to becoming a statistic and a superhero story, ligament tears have changed throughout the past forty year span. With technology advancing and athlete's bodies evolving the term career-ending has been remodeled. Now if you do not return from this injury producing as the same person you were, then that is when people speculate that you are done, and it is over. There are people who defy these odds and come back, sometimes, better than they were before they got hurt. The risk and hardship are so much plus the emotional toll it takes on the athlete. Their mind is going hundreds of miles fast and they do not know what to do next because they are torn. Referring to Ernis Kenty, again, who is facing all adversity despite what all is going against him in his struggle.

The psychological toll is enough knowing that you will not be the same anymore. Knowing that a cane or a walker is probably needed in the future because the pain in the knee is too great. Some athletes decide to quit or retire, depending on the level, so that they can avoid any further risk than what was needed.

Conclusion

I have had my own experiences with injuries that have had me out for games before. None have been as severe as the ones discussed in this paper. Over my career as a football player on all levels besides professional, I have only documented two types of injuries in my ten years of playing sports. That being two sprained ankles on both on my legs and a MCL sprain on my right knee. I have had my hardships with both and they all have taken a mental toll on me in different ways.

It was my senior year of high school football and we were on the road. It was our opponent's senior night, which is a night to honor the senior class one last time. During the middle of the game, I was going to make a tackle on ball carrier when a player fell on my ankle. My ankle started throbbing and I hobbled to the sideline as quickly as I could. When I fell on the sideline the athletic trainer came to me and started to do a base analysis to figure out what was wrong with my ankle. He came to the assumption that I had a sprained ankle, but I could continue to keep playing. The more I tried to play through the pain, the more it hurt worse and I could not take it anymore. I stopped playing and I missed the following week which was my senior night because of my ankle injury.

When I received news on my ankle, all I asked was "how long will I be out?" It was a trying time because I was trying to secure a college scholarship and I could not afford to miss any games. My mind was racing because it hurt just to move, and I was not receiving any special care, so I did not know what to do. After I missed my senior night, I was devastated from the simple fact that there were probably college scouts in the crowd and I did not play. After the season, I got depressed and thought to myself, if I had never gotten hurt then things would have been different. It still haunts my dreams today, that if I did not get hurt then I would have never been at Murray State.

My second ankle injury occurred during my sophomore year in junior college. It was already decided that we were not going to win the conference championship, so we had one last game. During the game I was chasing the quarterback for the opposing team. I had grabbed him by the shoulders and attempted to throw him down, but his body landed on my ankle. I could not move because of the pain and the trainers had to come take me off the field. Once again, I attempted to play through the pain, but it was no use. While on the sideline the other team made

a comeback and won the game. I had so many emotions going on through me because of what happened. I felt helpless like a damsel in distress. My team lost and all I could do is sit and watch them.

My last game in junior college was a bust because of I could not play. I was asking myself why this happening again. At a crucial point in my life, when a four-year school were in attendance, why was this happening? When we returned to our school, I shut myself from everyone because I felt as if I let my teammates down. This was nothing how it was in high school. This was very special to me because those guys were more like brothers to me. They were my brothers that I had grown with for over two years. It hurt me deeply because I was lucky enough to scrape by with the last-minute JUCO offer, but that would not work twice in a row.

This past year was my senior year, and this was the year I was pressing to make myself known to the NFL. We were in the middle of our season and I was concerned because there was no spotlight around my name. There were NFL scouts present at the game, so I was trying to impress the best I could. One play I was trying to be greedy and tackle the quarterback, but I did not do what I normally do, and I took a body to my knee. All I could feel was pain at my knee,

and for sure I thought my career was over with. When I went inside the trainer said I had a MCL sprain and I could continue playing if I wore a brace.

I was thinking out of all times why now? I continued the game in discomfort but the more I wore the brace the better I felt with it. I have mandatory rehab everyday and when I was not at practice I had to wear a brace. It was a straight-leg brace to help take way any stress that I would place on my knee. Another injury that had to happen at another crucial time, but this was more serious because it involved my knee.

All my career I was blessed not to have any serous injuries happen to me. I have been teammates with hundreds of people, and I have seen some who I call friends receive severe injuries just from freak accidents. When my opponent hit my knee, I was scared out of my mind because this was I have been trying to avoid my whole career. I was lucky enough to only receive a minor sprain that I could play on but still. When we were at team events, I would tend to stay to myself and work out by myself. I did not want to talk to anybody because, again, for the third time my career was on the line.

My dream ever since I was young was to be able to play in the NFL. I was closer than I have ever been before. Luckily, the next week was our off week, so I had time to recover but it very so much hurt me that this was over with. I contemplated about stop playing right now because the pain of getting out of bed, putting a brace on, and still trying to function normally was horrible. I had only suffered a minor sprain, but I had overlooked my career here at Murray State, and I thought my career was over with. Everything I had worked hard for and had prepare for all went down the drain because I was limited to playing the last few games of the season.

Three times throughout my career, I was an emotional wreck because I was at the wrong place at the wrong time. My injuries were small and minor, so what about those who have broken

a bone or who have blown out their knee. Everyone has a different mindset and are motivated by different subject matters, but a broken neck is still a broken neck at the end of the day.

In closing, all athletes are different and they all have a different approach to injuries. Some look forward to the challenge of coming back to injury and attempting to be at the peak of their career. Others see an injury that severe as a sign or an omen that they need to stop playing and focus more so on their life. There are the percentage of athletes who try to return but can not return to the same level of play and later referred to as “busts.” Athletes, such as Brandon Roy, Reggie Bush, Grant Hill, etc. have all gone through life changing events, and they were not able to make a comeback.

Concussions have more than doubled since protocol and records are being more detailed now since back in the pioneer days of sports. This topic brings fear to athletes who think that there is chance that they will not be in their right mind, or that they might die from this. A large percentage of amateur athletes have stopped playing sports because of this. Now that CTE has begun becoming a concern and athletes are learning that their brains are deteriorating from the impacts that they are taking. Even with more rules and safer gear the force that one takes on the body are still having an impact.

Since the shoulder is a ball-and-socket joint, it allows the arm to move around freely without any problems. With a shoulder tear the movement is constricted and can cause problems for the simplest activities. Having a complete shoulder tear will restrict the arm from doing anything because there is a hole where muscle should be. It is a common injury to have, especially for sports that require consistent arm motion. What is scary about a rotator cuff tear is that athletes do not return the same player as before.

Quad tears are not a common injury and are crippling. When the quad muscles tear, the leg is immobilized for months just so it can heal. The tear does more than just separate muscles and the tendons from each other. The kneecap will shift because there is nothing there to keep it in place. There is a chance that the athlete will not move the same as he did before. That what was said for Carlos Boozer who suffered one. When he returned from this injury he was never the same and it started the downfall of his career.

Broken bones have always been a career halt. Depending on which style of break it is, the recovery time for a broken bone will be extended. These have the biggest impact on an athlete's life because a device might be used if the body part does not heal right. Many athletes have thought about retiring because of this. Some can even cause death if not treated right. Nothing short of a miracle saved many athletes like Bert Trautmann. Everyone cannot have that same amount of luck, and they suffer dearly.

They have gone from being career-ending injuries to being nothing short of a little adversity. Ligament tears are becoming more common than they previously were. Many athletes come back from these injuries to continue the career that they started but some eventually fail. Robert Griffin has been shuttered away from being a great quarterback in the NFL because of his ligament tears. They are still considered serious because they are permanently damaged, and the likelihood of being a top athlete is very slim.

Why go through all of this? The psychological trauma from being told that you are paralyzed or that you will need some support system to walk normally. Is it because of a dream or is it because of something more than that? The risk of losing your life over a sport is far greater than seeking fame or glory from it. An athlete could lose their body parts, their family, and much more because of simple benefits from a sport.

References

Andrade, J. (2015, March 6). 11 Athletes Whose Promising Careers Were Derailed by Injuries. Retrieved 18, 2018, from https://www.boston.com/sports/untagged/2015/03/06/11-athletes-whose-promising-careers-were-derailed-by-injuries

Armstrong, A.D., MD, & Athwal, G.S., MD. (n.d.). Our knowledge of orthopedics. Your best health. Retrieved April 11, 2018, from https://orthoinfo.aaos.org/en/diseases--conditions/rotator-cuff-tears/

Barlow, R. (January 18). BU-Led Study May Explain CTE without Concussion. Retrieved April 9, 2018, from https://www.bu.edu/research/articles/bu-led-study-may -explain-cte-without-concussions/

Boston University [Image]. (2017, July). This combination of photos provided by Boston University shows sections from a normal brain, left, and from the brain of former University of Texas football player Greg Ploetz, right in stage IV of chronic traumatic encephalopathy. Chicago, IL: The Associated Press.

Bleacherreport. (1985). Joe Theismann broke his leg in a 1985 Monday Night Football game after being hit by the New York Giant's Lawrence Taylor in what was voted the NFL's "Most Shocking Moment in History."

Centeno, C., MD. (2016, August 29). Rotator Cuff Surgery Results: Only ½ of athletes Return to Play! Retrieved April 11, 2018, from https://www.regenexx.com/rotator-cuff-surgery-results/

Clayton, A. (Photographer). (2017, Feb 28). Running back Adrian Peterson is coming off a meniscus tear in his right knee, which limited him to three games last. [Photograph]. New York, NY: Associated Press.

Concussion Legacy Foundation. (2017, August 20). What is CTE? Retrieved April 9, 2018. From https://concussionfoundation.org/CTE-resources/what-is-CTE

Dailymail. (1956). Heroic: It was only days after the final that an X-ray revealed Trautmann had actually broken his neck.

(E. Kenty, personal communication, March 8, 2018)

(F. Hart, personal communication, March 15, 2018)

Felson, S., MD. (2017, February 17). What Is a Rotator Cuff Tear? Retrieved March 25, 2018, from https://www.webmd.com/fitness-exercise/guide/rotator-cuff-tear#1

Felson, S., MD. (2016, November 16). What Are Knee Ligament Injuries? Retrieved April 18, 2018, from https://www.webmed.com/fitness-exercise/guide/knee-ligament-injuries#1

Getty Images. [Image]. (2018, January 26). Rob Gronkowski is hit in the head by Barry Church during last week's AFC Championship [Photograph]. New York, NY: New York Post.

(J. Clay, personal communication, March 13, 2018)

Jussim, M. (2016, December 22). 5 Most Devastating Sport Injuries. Retrieved April 15, 2018, from https://www.mensjournal.com/sports/5-most-devastating-sports-injuries

John Hopkins Medicine. (n.d.) How to Repair a Torn Knee Ligament. Retrieved March 27, 2018, from https://www.hopkins medicine.rog/healthlibrary/test_procedures/orthopedic/knee_ligament_repair_92, P07675

Kary, J.M. (2010, October) Diagnosis and management of quadriceps strains and contusions/ Retrieved April 13, 2018, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2941577

Kuntz, C., MD. (2016, April). Spinal fractures. Retrieved April 16, 2018, from https://www.mayfieldclinic.com/PE-SpineFract.HTM

Manfred, T. (2013, May 4). 11 Examples of Athletes Playing Through Extreme Injuries. Retrieved April 15, 2018, from https://www.businessinsider.com/athletes-who-played-injury -2013-5#tigerwoods-won-the-2008-us-open-on-a-broken-leg-and-torn-acl-he-had-to-fight-through-91-holes-in-total-after-it-went-total-after-it-went-to-a-playoff-4

Menon, David. “What happens in the Brain during and after a Concussion?” www.BrainFacts.org, 11 June 2015, www. Brainfacts.org/ask-an-expert/what-happens-in-the-brain-during-and-after-a-concussion

Miller, J. (n.d.). PhysioWorks-PhysiotherapyBrisbane. Retrieved March 27, 2018, from https://physioworks.com.au/injuries-conditions-1/knee-ligament-injury

Our knowledge of orthopedics. Your best health. (2012, October). Retrieved April 14, 2018, from https://orthoinfo.aaos.org/en/diseases--conditions/fractures-broken-bones/

Powell, J.W. (2001, Summer). Cerebral Concussions: Causes, Effects, and Risks in Sports. Retrieved April 9, 2018, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC155423

Rozek, R. (2016, November 11). Knee Injury Attorney Milwaukee, Wisconsin. Retrieved April 18, 2018, from https://rozeklaw.com/injury/orthopedic/wisconsin-knee-injury.html

Sbnation. (2016, December). Earl Thomas breaks his leg against the Carolina Panthers [Photograph].

Stotss, J. (2016, April 25). Understanding Blake Griffin’s Partial Quad Tear. Retrieved April 12, 2018, from https://instreetclothes.com/2015/12/16/understanding-blake-griffins-partial-quad-tear/

Wheeler, C. (2013, July 19). Former Man City goalkeeper Trautmann, famous for playing on with a broken neck in 1956 FA Cup Final, passes away aged 89. Retrieved April 16,

2018, from https://www.dailymail.co.uk/sport/football/article-23702217/Forme-Manchester-City-goalkeep-Bert-Trautmann-passes-away-aged-89.html

Wilkerson, R., MD. (2016, February). Our knowledge of orthopedics. Your best health. Retrieved April 14, 2018, from htttps://orthoinfo.aaos.org/en/diseases--condititions/quadricep-tendon-tear/

Zarett, E. (2018, February 15). Snowboader Markus Schairer suffers broken neck in frightening crash. Retrieved April 16, 2018, from htttps://www.nbcolumpics.com/new/snowboader-markus-schairer-suffers-broken-neck-frightening-crash

4for4[Image]. (2015, August 3). This is a clear example of the lower leg is rotating, in but the body going out which led to RGIII's ACL tear.