OCR
Oxford Cambridge and RSA

CAMBRIDGE TECHNICALS LEVEL 3 (2016)

Exemplar candidate work

SPORT AND PHYSICAL ACTIVITY

05826–05829, 05872

Unit 17 – Sport injuries and rehabilitation

Version 1

CONTENTS

Introduction 3

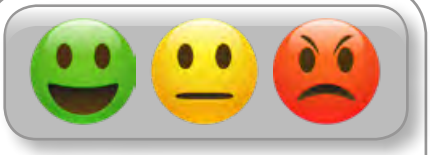
Commentaries 4

Exemplar candidate work 5

Would you prefer a Word version?

Did you know that you can save this pdf as a Word file using Acrobat Professional?

Simply click on **File > Save As Other . . .** and select **Microsoft Word**



We value your feedback

We'd like to know your view on the resources we produce. By clicking on the icon above you will help us to ensure that our resources work for you.

INTRODUCTION

This is a guide for teachers so that you can see how we mark work for Cambridge Technicals.

The guide contains exemplar candidate work for this unit along with the grading criteria.

The accompanying commentary explains why each piece of work was awarded that grade. Additional guidance has been added to suggest improvements that could be made in order to achieve a higher grade.

Please always refer to the centre handbook https://www.ocr.org.uk/qualifications/cambridge-technicals/sport-and-physical-activity-2016-suite/#level-3 for full details of the assessment for this qualification. These exemplar answers should also be read in conjunction with the sample assessment materials.

Model Assignments

Model assignments are available for the following units from the link below.

Unit 2 Sports coaching and leadership

Unit 5 Performance analysis in sport and exercise

Unit 6 Group exercise to music

Unit 7 Improving fitness for sport and physical activity

Unit 8 Organisation of a sports events

Unit 10 Biomechanics and movement analysis

Unit 11 Physical activity for specific groups

Unit 12 Nutrition and diet for sport and exercise

Unit 13 Health and fitness testing for sport and exercise

Unit 14 Working in active leisure

Unit 17 Sports injuries and rehabilitation

Unit 18 Practical skills in sport and physical activities

Unit 19 Sport and exercise psychology

Unit 20 Sport and exercise sociology

https://www.ocr.org.uk/qualifications/cambridge-technicals/sport-and-physical-activity-2016-suite/assessment/#level-3

COMMENTARIES

P1: Describe the signs and symptoms of common chronic and acute sports injuries

Signs and symptoms described for all the chronic and acute injuries outlined in TC. Pass.

P2: Describe possible psychological effects of suffering a sports injury

Brief, but present. Pass

P3: Explain intrinsic and extrinsic factors which influence the risk of sport injuries

Factors explained. Pass.

P4: Take steps to minimise the risk of sports injuries occurring during a sports activity

Risk assessment is really only borderline evidence of 'taking steps'. It is a written document - not the learner taking the steps. Easiest way to evidence this is to photocopy the evidence from Unit 2 showing how the learner ensured safety of their participants, e.g. warming up, risk assessment. Would accept this first time of visiting but would give guidance for future. Pass, BOD.

P5: Respond appropriately to acute sports injuries

This is clear evidence of the learner responding, but it is not clear if their response is appropriate. Would accept this for a first visit but either needs learner write up about how they responded, or staff witness statement. Pass.

P6: Create an Emergency Action Plan for a specified organisation

Pass.

P7: Describe the roles of different agencies and professionals involved in the rehabilitation of a sports injury

Pass.

P8: Describe the different types of treatment that can be used to support the rehabilitation of sports injuries

All covered. Pass.

P9: Describe the different phases of treatment of common sports injuries

Phases described. Pass.

P10: Plan a rehabilitation programme which is designed to support a client in their recovery from a specified sports injury

Pass. A detailed, clear and suitable rehab programme planned for a specific injury.

M1: Analyse the link between the way in which a sports injury occurs and the physiological and psychological affect it may have on the sports person

Analysis of the way in which an injury occurs and psychological effect if may have. Range of feelings covered. Merit.

M2: Explain how appropriate warm-ups and cool-downs can reduce the risk of sports injuries

The learner does not need to describe a warm up – the criteria is about how the warm up and cool down can reduce risk of injury. This is covered amongst the rest of the info. I have seen more detailed explanations, but this is acceptable. Merit.

M3: Explain how different agencies and professionals may be involved in the rehabilitation of different types of short, medium and long-term sports injuries

This could be clearer – short, medium and long term should all be covered. Would encourage a more logical, step by step for short, medium- and long-term injuries. Merit.

M4: Justify the types and phases of treatment and related exercises within the rehabilitation programme planned with clear reference to SMART principles

Exercises have been justified but limited if any reference to SMART principles. They are specific and measurable etc but for future learner should make reference to SMART principle. Merit.

D1: Analyse how measures to optimise player safety are recognised and legislated for in a specific sport

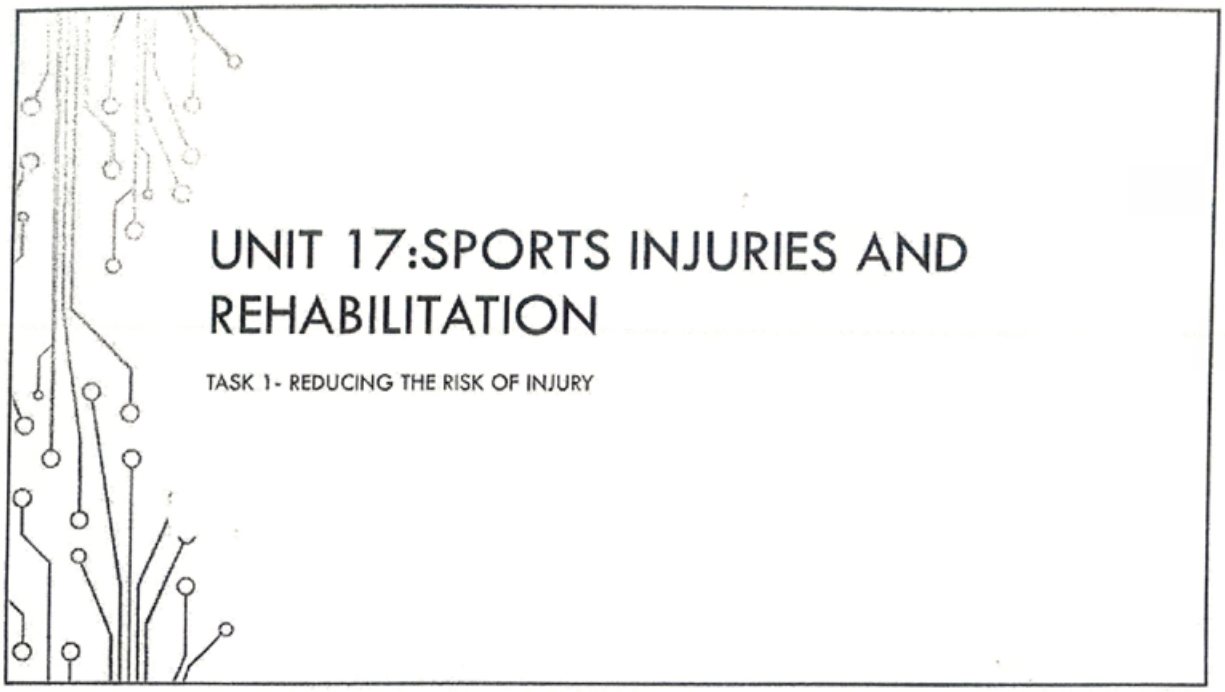
Some good analysis. Often learners just describe/ explain the rules – there must be some analysis present – e.g. considering if the rules are implemented successfully? Is it only at elite level? Does the rule work? Do players get around it? Distinction.

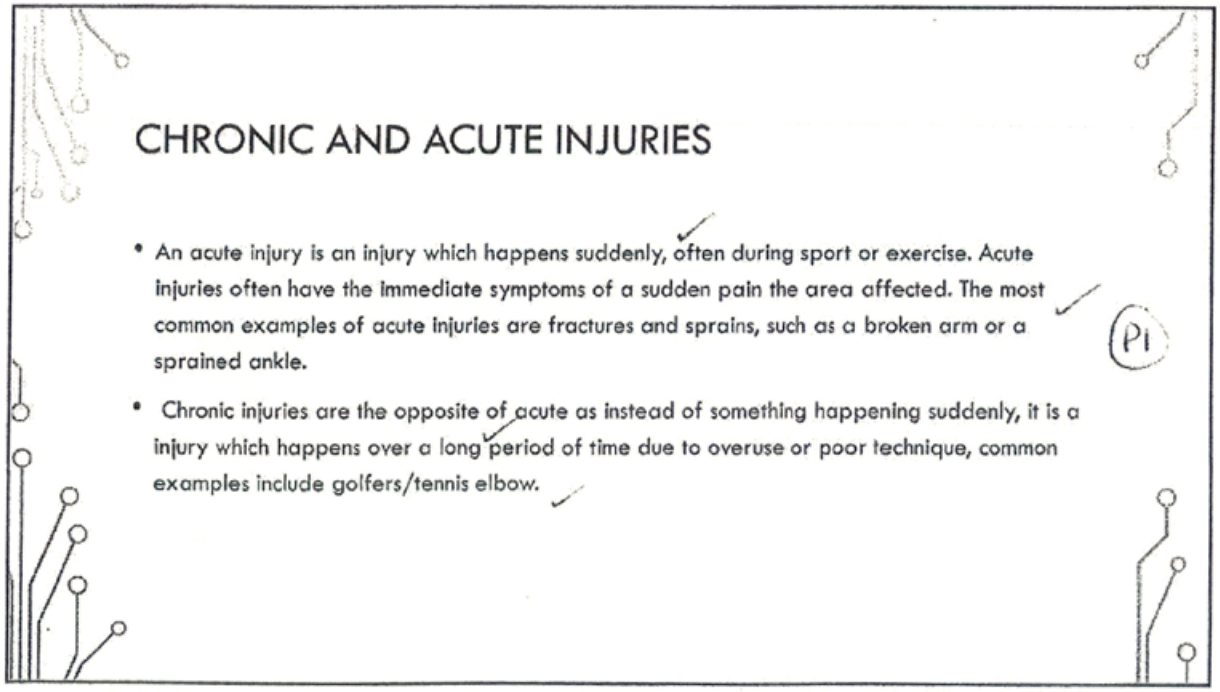
D2: Anticipate and explain possible adaptations that may be required to the planned rehabilitation programme if progress is not as expected

Some hints at ways that the programme could be adapted during the plan but then some more explicit ways that the plan could be adapted. Distinction.

Final/overall grade – Distinction.

EXEMPLAR CANDIDATE WORK





1

SPRAINS AND STRAINS (ACUTE) (P1)

- Sprains- A sprain occurs when ligaments stretch, tear or twist as the result of excessive amount of force on a joint. The most common areas for sprains is in the ankle, wrist and knee as there is often a lot of pressure applied at these joints. Symptoms of a sprain would be pain around the joint, unable to use the joint as you normally would and swelling and bruising around the affected area.
- Strains- A strain is when a tendon is stretched, torn or twisted. The symptoms of a strain can be similar to a strain as for example both bruise and swell around the affected area. Also it is likely going to be painful even when resting, as the muscle or tendon will be very weak, meaning that you wont be able to use that muscle around the tendon at all.

BROKEN BONES (ACUTE)

- A broken bone is always called a fracture. The are two types of fractures; an open/compound fracture, which is where the fracture punctures the skin and a closed fracture, where the bone doesn't puncture the skin. Broken bone can have a variety of different symptoms depending the size location and severity. Some symptoms are swelling/bruising around the area, pain around the area when movement is applied, paralysis around the fracture which can be temporary and permanent, if a bone has pierced the skin or deformity of the body, like the limbs. (P1)

2

DISLOCATION (ACUTE)

- A dislocation is when multiple bones collide together meaning they are forced from their normal position. This type of injury is usually caused by a big impact. Signs and symptoms of a dislocated bone is often incredibly painful, particularly when movement or weight is applied to the joint. Often the affected area appears out of place or deformed, very swollen and discoloured. Plus there can be a numb or tingling sensation around the affected area. The most common place for a dislocation is at the shoulder and is particularly in contact sports such as rugby.

TORN LIGAMENT(ACUTE)

- A torn ligament is a partial or complete disruption of the ligament when the joint is moved in an unusual way causing the fibres in the ligament to snap and break. Symptoms of a torn ligament are pain, swelling and bruising at the area where the tear occurred, the area is often tender to touch and you won't have a full range of movement of that joint due to the tear. The main areas where torn ligaments occur is at the ankle and knee particularly during sports such as sprinting where its easy to twist or land awkwardly putting lots of stress on the knees and ankles where torn ligaments often occur.

3

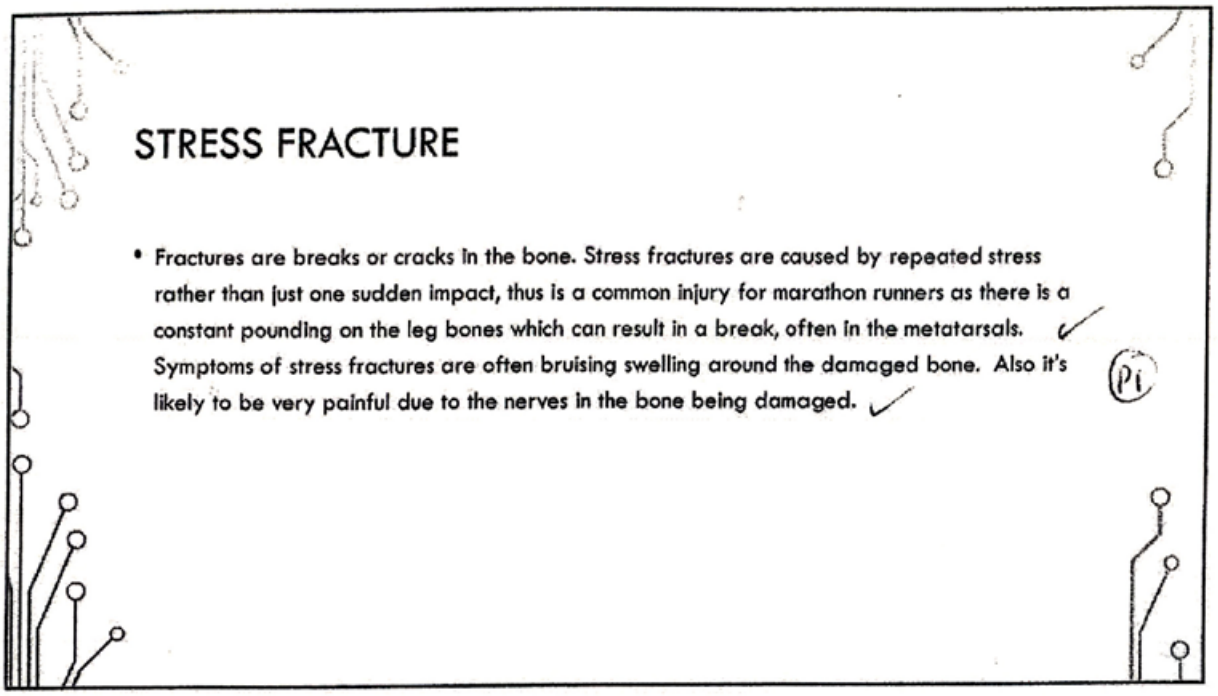
TENNIS/GOLFERS ELBOW(CHRONIC)

- Tennis and Golfers elbow are injuries which cause pain where the tendons attach to the elbow. The only difference between the two being that golfers elbow is an injury on the inside of the elbow and tennis elbow is on the outside of the elbow. Both have near identical symptoms such as for both the pain is predominantly at the elbow but can stretch down the forearm and wrist. Also you are likely to feel stiffness in the elbow along with a numb/tingling sensation and weakness in wrists and hands. Therefore you are likely to struggle with day to day use of the affected arm and it's best to use your arm as little as possible.

SHIN SPLINTS

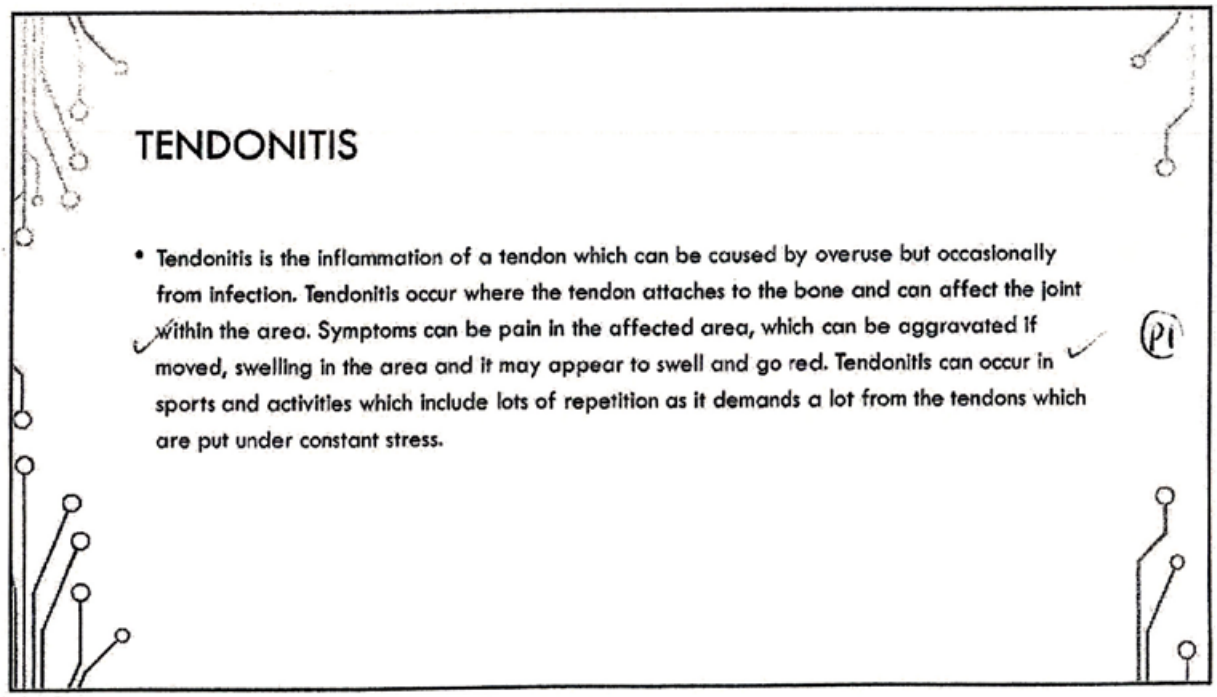
- Shin splints is a pain around the tibia (shin) bone. It can often arise after sports where there is a lot of constant pressure put on the leg, such as road running, or sports with sudden stops and starts like tennis or basketball. The main symptom of shin splints is the pain in the lower leg which develops during exercise. However there can be pain on the gastrocnemius as well as just around the bone. Your leg is likely to feel sore and it's advised that you don't do any exercise or put any pressure on it until it has fully recovered.

4



STRESS FRACTURE

- Fractures are breaks or cracks in the bone. Stress fractures are caused by repeated stress rather than just one sudden impact, thus is a common injury for marathon runners as there is a constant pounding on the leg bones which can result in a break, often in the metatarsals. ✓ Symptoms of stress fractures are often bruising swelling around the damaged bone. Also it's likely to be very painful due to the nerves in the bone being damaged. ✓ (Pi)



TENDONITIS

- Tendonitis is the inflammation of a tendon which can be caused by overuse but occasionally from infection. Tendonitis occur where the tendon attaches to the bone and can affect the joint ✓ within the area. Symptoms can be pain in the affected area, which can be aggravated if moved, swelling in the area and it may appear to swell and go red. Tendonitis can occur in ✓ sports and activities which include lots of repetition as it demands a lot from the tendons which are put under constant stress. (Pi)

5

PSYCHOLOGICAL EFFECTS OF INJURY

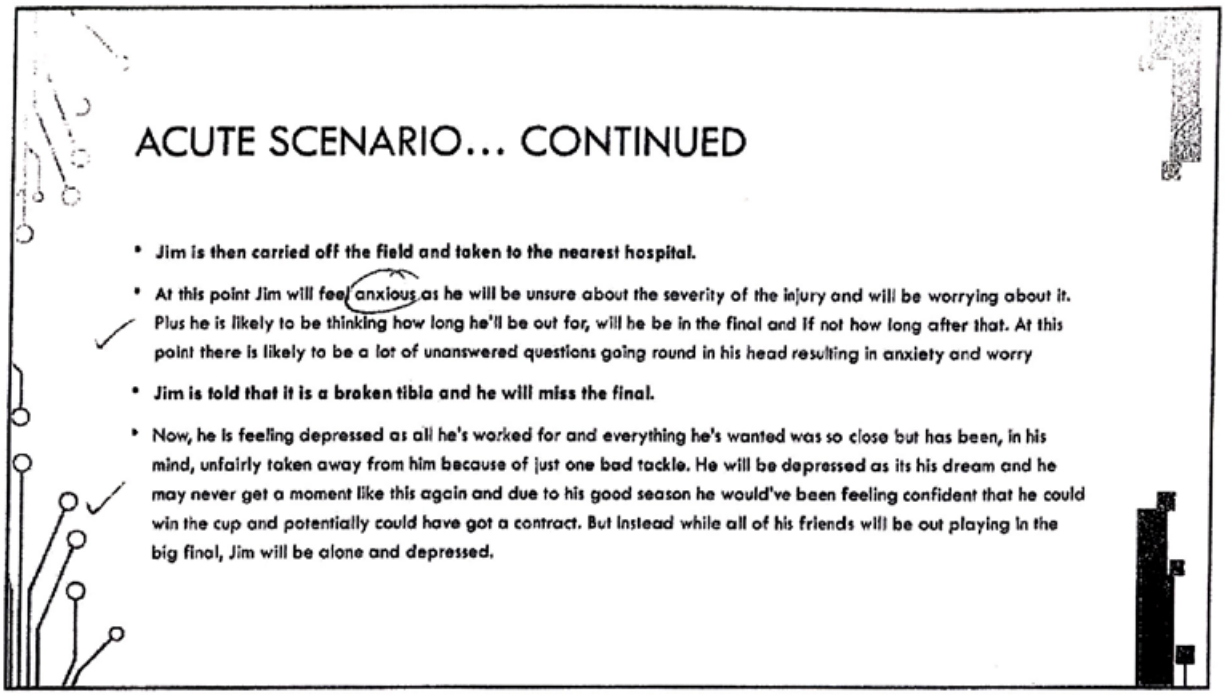
- There are 6 possible psychological effect of injury, these are: Anger, anxiety, frustration, depression, isolation, lack of confidence.
- Anger- If the injury was someone or something's fault you may feel anger towards that person thing.
- Anxiety- You maybe worried about if you'll ever fully recover and how long the injury will last.
- Depression- Suddenly not doing the thing you love and not in your normal routine can cause depression.
- Isolation- If you cannot be with the people you are with all the time then you're likely to feel alone and isolated without them.
- Frustration- Recovery can be very slow and thus the rehabilitation period can be frustrating.
- Lack of confidence- The fear of the injury reoccurring may lead to being fearful and lacking in confidence, particularly in contact sports.

P2 - Descriptions

ACUTE INJURY SCENARIO

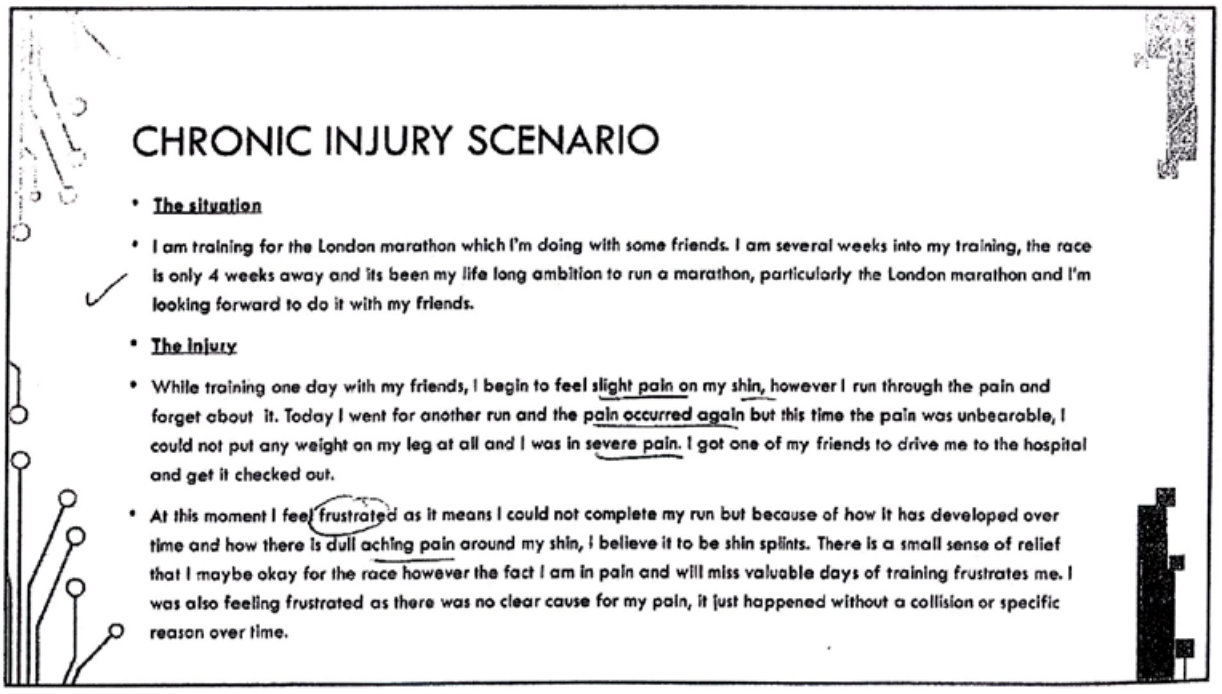
- **The situation**
- Jim is a young footballer playing for his local club. His team have won the league with a few games left of the season and are in the cup final at the end of the season. The cup final is the biggest game of the season and also all the scouts from premier league teams will be at the game to watch. Jim has been the top scorer for his team and is likely to be picked up by one of the scouts to play for a premier league team and help Jim achieve his dream of becoming a professional footballer.
- **The injury**
- In the final league game of the season, the last game before the final, Jim is caught by a nasty late challenge. When he looks down he can see swelling around the front of leg and he cannot move it at all.
- Immediately Jim feels angry at the person who made the challenge and the fact he is in severe pain. Although at this point he wont know the severity or what's wrong with him, he is likely to be incredibly angry as he's in severe pain and there's a chance he will miss the biggest game of his life. It's unlikely he'll be thinking long term other than will I be okay for the final next week.

7



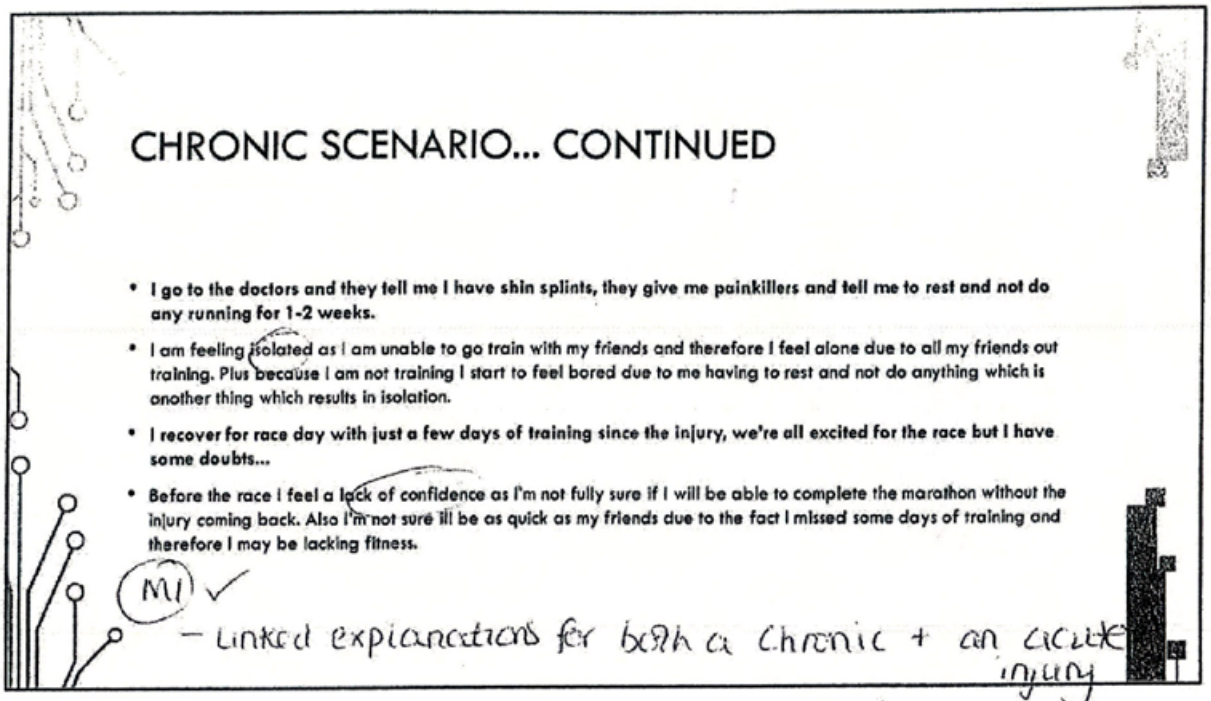
ACUTE SCENARIO… CONTINUED

- **Jim is then carried off the field and taken to the nearest hospital.**
- At this point Jim will feel anxious as he will be unsure about the severity of the injury and will be worrying about it. Plus he is likely to be thinking how long he'll be out for, will he be in the final and if not how long after that. At this point there is likely to be a lot of unanswered questions going round in his head resulting in anxiety and worry
- **Jim is told that it is a broken tibia and he will miss the final.**
- Now, he is feeling depressed as all he's worked for and everything he's wanted was so close but has been, in his mind, unfairly taken away from him because of just one bad tackle. He will be depressed as its his dream and he may never get a moment like this again and due to his good season he would've been feeling confident that he could win the cup and potentially could have got a contract. But instead while all of his friends will be out playing in the big final, Jim will be alone and depressed.



CHRONIC INJURY SCENARIO

- **The situation**
- I am training for the London marathon which I'm doing with some friends. I am several weeks into my training, the race is only 4 weeks away and its been my life long ambition to run a marathon, particularly the London marathon and I'm looking forward to do it with my friends.
- **The injury**
- While training one day with my friends, I begin to feel slight pain on my shin, however I run through the pain and forget about it. Today I went for another run and the pain occurred again but this time the pain was unbearable, I could not put any weight on my leg at all and I was in severe pain. I got one of my friends to drive me to the hospital and get it checked out.
- At this moment I feel frustrated as it means I could not complete my run but because of how it has developed over time and how there is dull aching pain around my shin, I believe it to be shin splints. There is a small sense of relief that I maybe okay for the race however the fact I am in pain and will miss valuable days of training frustrates me. I was also feeling frustrated as there was no clear cause for my pain, it just happened without a collision or specific reason over time.



CHRONIC SCENARIO... CONTINUED

- I go to the doctors and they tell me I have shin splints, they give me painkillers and tell me to rest and not do any running for 1-2 weeks.
- I am feeling isolated as I am unable to go train with my friends and therefore I feel alone due to all my friends out training. Plus because I am not training I start to feel bored due to me having to rest and not do anything which is another thing which results in isolation.
- I recover for race day with just a few days of training since the injury, we're all excited for the race but I have some doubts...
- Before the race I feel a lack of confidence as I'm not fully sure if I will be able to complete the marathon without the injury coming back. Also I'm not sure ill be as quick as my friends due to the fact I missed some days of training and therefore I may be lacking fitness.

M1 ✓

- Linked explanations for both a chronic + an acute injury

- Physical + psychological symptoms of injury.

3

Intrinsic and extrinsic factors which can influence injury.

Extrinsic:
These are risks or forces from outside the body (external forces) such as from objects or other individuals making contact with someone.

Intrinsic:
These are risks or forces from within the body (internal forces).

Extrinsic factors

Type of activity
The type of activity can cause an injury as for example in contact sports such as rugby or boxing there is a high chance of injury as the body is often put under heavy impact, such as being caught with a good punch. Also if someone is new to a sport and using muscles which they are not used to using then there is a risk of pulling or tearing a muscle. Plus sports such as running and tennis can cause overuse injuries such as shin splints.

Coaching/supervision
If a coach teaches the wrong technique it can increase the chance of someone getting injured. For example in sports such as golf and tennis bad technique can lead to injuries such as golf and tennis, thus it's important to have a coach that knows what they're doing. Supervision can cause4 an injury as if there is no referee for example then people are likely to make bad tackles, which in sports such as football or rugby, are likely to cause an injury.

Environmental factors
The environment can cause injury in multiple ways. Firstly if the playing surface is inadequate, such as there is excess water on it, its likely people will slip, particularly if they are wearing inappropriate footwear. Other ways the environment can cause injury is through the weather. If it is particularly hot and people are doing lots of exercise there is a chance they can suffer from things like sun stroke or dehydration.

Equipment
If players wear inappropriate clothing such as not wearing shin pads then there is a high chance of injury, particularly in football or hockey. If a bad tackle makes heavy contact with your leg then there is a chance of getting a broken tibia. Also if the equipment are not set up properly, such as goals not being tied down, can cause a very serious, as if they fell on someone the results could be fatal.

Safety hazards
Safety hazards can cause an injury as they cause danger, an example being if the goals aren't tied down there is a risk of serious injury, like falling on someone. Other things include slip hazards or bits of glass on the playing surface are likely to cause injury if not attended to.

✓ Explain intrinsic factors which influence the risk of sports injuries (P3)

Intrinsic and psychological factors.

Physical preparation

Training is a physical factor which can massively affect the risk of injury. If someone has a marathon to do and have done no training before hand, then they will more than likely not make it due to physical exhaustion or potential muscle difficulties such as a pulled muscles they won't be prepared for the amount of intense exercise put on them. In extreme cases people may get heart attacks as the heart is not able to pump out blood at the intensity and for the long length of time needed for someone to complete a marathon. In addition, training on a skill or aspect of a game can also reduce the risk of injury through perfecting a technique. Such as performing a tackle in football where getting it wrong could lead to you, or the opponent, getting injured such as a broken leg.

A warm up is a physical factor which can affect the likelihood of injury as a warm up helps pump blood around the body, particularly to the muscles which will need to be worked, so in football, the leg muscles such as the gastrocnemius and the quadriceps. The extra blood flow in the muscles makes them more stretchy (pliable) and therefore are less likely to tear when the muscle is actively moving during a sporting activity.

Without a cool down, the performer is likely to have multiple aches and pains over the next couple of days due to lactic acid build up in the muscles which comes as a result of blood gathering in the muscles. This means they are at a higher risk of pulling a muscle if they exercise again without recovering properly. This occurs when exercise is stopped suddenly. When someone performs a cool down then it allows the heart to slowly return to its resting rate and so these side effects are less likely to happen.

Fitness levels can also increase or decrease the chance of injury. For example someone who is particularly unfit and does not have strong muscles would not be able to participate in a long distance run due to their body not being able to cope. Whereas someone who has trained and has a decent overall level of fitness would be able to complete the same run quite comfortably as their body and muscles will be more accustom to this sort of physical activity because their muscular strength will be good enough to cope with the distance.

Overuse or overtraining is another example of how a physical factor can increase the chance of an injury occurring. For example if someone went to the gym every day and worked on the same part of the body every day, such as their biceps, then they are likely to pick up tendonitis in their elbow joint. To reduce the risk of this you should training different parts of your body on different days and include rest and recovery days.

Muscular imbalance is the final physical factor for affecting injuries as is where one muscles is weaker than it's opposite. This could be two muscles round a joint or a muscle on a right side of the body bigger than the same muscle on the left side. This could cause an injury as for example if someone had a weaker quadriceps muscle on one side then it is more likely to cause dislocation or pain around that joint due to it being weaker and more vulnerable. Also in football came in for a challenge the weaker the leg is more likely to suffer damage as it has got less protection from the muscle.

12

Psychological Factors

Motivation can affect the risk of someone getting injured as if they're too aroused then it's likely they will try too hard and put themselves in situations they don't need to go in, like a footballer going into a tackle he is unlikely to win, meaning they will likely injure themselves or the other player. However the opposite can also cause injury. If someone is not motivated then they will not commit to fully to tackles or duels which is more likely to see them injured. Whether it be a shoulder to shoulder in football. They are likely to be shoved over and this could cause injury. Being too motivated and committed to training might mean somebody comes back from injury too soon or does too much and makes an injury worse.

Aggression can also cause injury if it is not under control as they will lose any reasoning and likely take their anger out on themselves or other players. This could be a football who is getting angry trying to injure another players through a very strong challenge or dirty play, like an elbow for example. This lack of control will likely lead to injuries like cuts and concussion.

Arousal/Anxiety may also cause injury as if someone is experiencing these feelings of being nervous and overwhelmed they likely have their mind elsewhere and are not fully concentrating on what they are doing. This could cause an injury as if someone was playing rounders and a fielder is not looking when a ball is in play then it may strike them. If in the head it could cause serious injuries or concussion.

13

Individual Variables

Gender can affect the risk of injuries as females are actually at a greater risk of suffering knee injuries than males due to females having wider hips. This can disrupt the alignment of the knee and therefore cause strain on the thigh muscles as well as weakening the knee ligaments. In addition to this, there is also an increased chance of getting osteoporosis in women. This comes as a result of women having less bone density than males as well as Oestrogen, a hormone that protect bones in women, decreases sharply when women reach menopause. This results in bone loss and can mean they are at a higher risk of fractures.

Age can also be a factor as young children will not have fully developed, strong bones and therefore should not take part in any full contact sport because of the risk of damage to growth plates. Plus, at the other end of the spectrum, when you get older our bones get weaker and therefore are frailer so older people are more likely to get fractures. This as a result means that there bones and joint are more likely to suffer damage, particularly during sport. A final point would be that a young child playing a sport against an adult would almost certainly get injured, particularly in contact sport due to the differing strengths and abilities.

Flexibility can affect the chances of injury as someone with flexible joints will be able to perform a wider range of movements at each joint than someone who wasn't flexible. For example, an inflexible gymnast will likely suffer a joint related injury, such as a sprain or strain, due to all the twists and turns during a routine.

Diet and nutrition can also cause potential injury. People with an unbalanced diet may have deficiencies which could lead to injuries, such as having a lack of protein can mean that muscles don't recover as quickly or as strong and therefore are weaker and more prone to tears. This is because protein is vital in repairing damaged muscle fibres. Similarly, not having enough carbohydrates could cause an injury due to lack of energy. If someone was running a marathon but had a lack of carbohydrates they will likely not be able to complete it due to lack of energy which could cause someone to collapse through physical exhaustion.

Sleep can also affect the chance of someone getting injured. The main side effect coming from lack of sleep is lack of concentration due to being tired. Most sports require a lot of concentration and in sports which come with a risk of injury, injuries are more likely to occur. An example of this could be in boxing. If someone is not concentrating in the boxing ring then they are likely to get caught out and potentially be knocked out or just badly bruised, cut or dazed.

Previous injuries can also cause potential injuries as often an injured area may recover, but not fully and maybe slightly weaker than prior to the injury. This makes that particular area more vulnerable. An example of this would be someone like Michael Owen who often suffered from torn hamstrings. This shows that his hamstring muscles were clearly weaker than before they were injured, meaning they often got torn.

Risk Assessment Form		Degree of Risk							Measures and Action
		Severity			Likelihood				
Name of Assessor: Activity: Rounder's tournament P3 ✓ Intrinsic / Extrinsic risk factors		Death	Over 3 day injury	Minor injury	Extremely likely	Frequent	Slight Chance	Risk Level	Control Measures P4✓ Steps to minimise risk in a rounder's tournament
Task / Premises/ Equipment	**Hazard Identified**	**A**	**B**	**C**	**1**	**2**	**3**		
Walking down to the pitch	People slipping while walking down			x			x	C3	Tell everyone to walk and do not run, particularly important with children.
	Children walking off track and getting lost			x			x	C3	Tell children to stick together as a group and also make sure to be vigilant and look out over them at all times.
	Fights between members of the group			x		x		C2	Beforehand remind everyone how they are expected to behave but also look out over the group to ensure that if arguments or confrontations occur that the teacher steps in and they stopped immediately.
Once down on the pitch	Member of the group get sun burn or heat related illnesses such as dehydration or sun stroke if it's a hot day.			x			x	C3	Ensure that if it is sunny ensure that everyone wears sun cream and advise the use of sun hats to protect people from the sun. Plus, make sure that everyone has access to water.
	People with incorrect kit could get injured. For example if a base is broken and has a sharp edge it could badly hurt someone running past or putting their hand on it.		x				x	B3	When on the pitch the teacher needs to look over everyone and ensure they all have correct kit and trainers etc. if not tell the group to do so. Also ensure that when people are getting bats that they are not broken, like have no splits in them. Plus the bases are all weighed down correctly and there are no sharp edges on any of the posts.
	Glass or other sharp objects on the pitch, people falling or tripping on it.		x				x	B3	Check the surface of the pitch before anyone goes on it to it, like checking for things on the pitch that can cause a hazard.
As the drill or warm up begins.	Slips, trips and fall on a slippery surface.			x		x		C2	Tell everyone to be careful, don't make contact with others as this increases the risk of injury

When giving teaching the group a technique or skill	If the coach teaches an incorrect technique then injuries can occur through poor technique, like incorrect way to swing a rounder's bat.		x				x	B3	Ensure the person teaching knows the correct technique themselves and thus are qualified to teach the group. Also give examples of what not to do and how that will cause an injury so the group know what is not acceptable and what is.
When equipment such as rounder's bats have been handed out.	People who have never used one before or who are immature may mess around with and potentially hit someone else in the group with it.		x				x	B3	Before everyone picks up their bat inform the group of the danger that can be cause through incorrect usage. When they are not using it they should either place it on the ground or just hold it still.
During drills or warm up	Running into equipment or people.			x		x		C2	Tell everyone to be careful and always be looking where they are going, keep looking up and around them to ensure any accidents such as this are less likely to happen.
	Getting hit by the ball.		x				x	B3	Tell everyone to look out where they are throwing the ball, but also those who don't have the ball must look around and ensure they are not likely to get in the way of a flying ball.
When the game starts	Stand behind batter and get hit with a bat or a ball.		x				x	B3	Mark a line where people on the batting team stand so they out of the way of everyone playing, especially the batter.
	Children not watching play get hit by the ball.		x				x	B3	Tell everyone to always watch the ball and tell to concentrate, this means if a ball does come flying towards them then they can attempt to catch or get out the way.
	Someone not holding hold of the bat lets go and it flies into someone.		x				x	B3	Tell everyone to keep a tight hold of the bat and don't let go until you have got all the way back to round to the waiting to bat line.
Walking back up.	People getting lost			x			x	C3	Ensure that everyone that is supposed to be walking is, tell everyone at the start to stay as a group and do not leave the group at any time.
	People slipping over			x			x	C3	Tell everyone to be careful and not to run and only walk.
	People fighting within the group			x			x		Remind everyone of how they are expected to behave and not at any time to fight with other members of their group.

M2

M2. Explain how appropriate warmups and cool downs can reduce the risk of injury

Components of a warm up

To start it's important to do a pulse raiser in order to warm up the muscles and make them more pliable meaning they are able to be more flexible without getting damaged. This helps warm up the athlete and gradually increases their heart rate. An example of this would be if football is the activity, then a light jog round a football pitch. It's important that it's not a sprint as that would defeat the object of a pulse raiser.

This is then followed by dynamic stretches. These are stretches which involve movement, hence dynamic. Thus, examples of these are a lunge with a body twist, high knees, heel flicks or jump for a header. These particular examples are important as all of these movements are likely to be needed during a football match.
Following on from these dynamic stretches there are the static stretches. These are stretches which are done while stationary. Examples of this include ones pictured on the right:

Stretching before a football match can reduce the risk of injury as it increase the flexibility of the muscles allowing them to perform a greater variety of movements. For example performing high knees will mobilise the hip and knee joints. The synovial fluid will increase and thus allow a larger range of movements. This means that when stretching for a ball in a match you can reach it with less chance of getting a muscle tear for example.

Then follows a sports-specific exercise. This is basically a drill which is designed to teach or practise skills which will be required in the sport's activity. An example of a simple passing drill for football could be like the one pictured to the right. This is an important part of the warm up as it prepares the players for what they're about to do and "gets the players eye in". In other words, the players get used to the ball at their feet and builds their confidence before playing. Therefore, the skill drill can improve a player's touch so that when the game starts, they're not rusty. Having a poor touch is more likely to create scenarios for late tackles and thusly can create a potential injury. In addition, performing a skill drill as well as the rest of the warm up can also help reduce the risk of muscle related injuries such as tears and strains as it continues to keep the muscles warm and pliable.

Physical benefits of a warm up

There are multiple physical benefits to a warm up. Firstly, your muscles become warmer and more pliable, meaning that they are stretchier, which decreases the risk of injury. Also, keeping the muscles warm will prevent acute injuries such as hamstring strains and will stave off overuse injuries by allowing the body to prepare steadily and safely. The final physical benefit of a warm up is that it increase the delivery of oxygen and nutrients to the muscles before exercise and removes waste products such as CO2. This will improve performance as the muscles can perform better and for longer with more oxygen.

Psychological effects of a warm up

Psychological effects of a warm up can include things like getting motivated for the sporting activity. For example starting a warm up can get a footballer thinking on the game and will get the players focused on the match. This is important as a player that is not focused has a higher chance of not being fully committed or not concentrating which can get them injured. Plus some athletes may benefit from setting individual warm up targets, and the sense of achievement before a game can motivate an athlete. Another way the warm up benefits a player psychologically is that not doing a warm up can lead to a dramatic increase in blood pressure which can cause stress. A player that is stressed or anxious is again more likely to pick up an injury through either not being focused fully and perhaps not concentrating on the game or too aroused causing them to make irrational decisions putting themselves and others in danger.

Key components of a cool down

The first step of every cool down should be a very steady slow jog. An example of this for football could be a jog from one side-line to the other and back. It's very important that the jog is no more than 25% effort. This helps as it keeps oxygen flowing through the muscles which will then help remove lactic acid. For example a footballer after a match is likely to have very sore quadriceps and gastrocnemius muscles. A light jog will help remove lactic acid from these areas.

This is followed by doing various static stretches, predominantly leg based if the sport is football. However in other sports you'd change it to stretching which is targeted to the muscles which have been worked. The stretches should be similar to the ones done earlier in the warm up. Again, stretching also helps remove the lactic acid from the muscles and therefore removes muscle soreness which can be felt for days after if a proper cool down isn't performed.

Physical benefits of a cool down

The main physical benefit of a cool down is to remove lactic acid and other waste products which can cause muscle soreness for the next few days. The cool down does this as when you stretch it removes the lactic acid from your muscles. Plus it can reduce the risk of dizziness and fainting which can occur due to blood pooling when exercising is suddenly stopped. A cool down allows a gradual end to exercise rather than such a sudden stop.

Psychological befits to cool down

The main psychological benefit to a cool down is that it allows players to switch off and calm down. During exercise players are likely to be highly concentrated and potentially agitated. The cool down is a chance to relax and slowly wind down and switch off back to a normal level. Plus it's also a time to reflect on performance and if someone did something wrong like a bad tackle then the correct technique can be taught which in future will lower the risk of injury.

19

D1: Analyse how measures to optimise player safety are recognised and legislated for in a specific sport

Football

Rules

Fa- fouls and misconduct- http://www.thefa.com/football-rules-governance/lawsandrules/laws/football-11-11/law-12---fouls-and-misconduct

If someone does any of the following offences towards an opponent then a direct free kick or a penalty MUST be awarded:

Jumps at
Charges
Kicks or attempts to kick
Pushes
Strikes or attempts to strike (including head-butt)
Tackles or challenges
Trips or attempts to trip

These rules are enforced by the referee or linesman. They will firstly blow their whistle to stop play and then point to where the offence occurred. The referee then will speak to the culprit as well as making the decision of whether the offence was any of the following to decide what, if any, extra punishment is necessary:

- Careless is when a player shows a lack of attention or consideration when making a challenge or acts without precaution. No disciplinary sanction is needed
- Reckless is when a player acts with disregard to the danger to, or consequences for, an opponent and must be cautioned.
- Using excessive force is when a player exceeds the necessary use of force and endangers the safety of an opponent and must be sent off.

This would keep players safe as it deters players from committing any of these offences as they know there is a potential punishment which could cost the team the game through the free kick or if someone is sent off. Therefore it's less likely that a player will get injured because the likelihood of these offences are minimised. Or in lower leagues players/teams are fined as well as missing the match/matches which can have a big impact on the financial situation of a team. However the issue with referees and officials in general judging these offences is that they can only view it once and at full speed. In the heat of the moment, the referee may get the decision wrong and thusly may potentially give the wrong sanction, like a yellow card for a red for example. As a result, players may get away with potential career ending challenges and injuring other players. Although, the FA are able to take retrospective action and still give the player a suspension so they will miss future games or get a fine. For

example Zlatan Ibrahimovic and Tyrone Mings both had a similar punishment in the Premier League this season. But, this does not occur in lower league football as if a referee misses something they cannot take retrospective action due to a lack of evidence, for example in the premier league there is video evidence.

VIOLENT CONDUCT

Violent conduct is when a player uses or attempts to use excessive force or brutality against an opponent when not challenging for the ball, or against a team-mate, team official, match official, spectator or any other person, regardless of whether contact is made.

In addition, a player who, when not challenging for the ball, deliberately strikes an opponent or any other person on the head or face with the hand or arm, is guilty of violent conduct unless the force used was negligible.

Violent conduct should always result in a red card for the offender. This will result in a 3 match ban (and sometimes more if retrospective action is taken) and the player will be removed from the rest of the game. This will deter players form committing these kind of offences and therefore prevents injuries to other players and increases the safety of the sport. However, off the ball incidents are often hard to spot as referees and officials are usually looking at the ball and can therefore miss incidents away from the ball. As a result, particularly in Sunday league and grassroots football, these offences can go unpunished yet still cause serious injuries. Usually however, in professional football, these incidents are spotted on cameras and action replays and so the right action is given. As a result, these offences are unlikely to happen in professional matches due to the certainty of the consequence but in amateur football, players may think they'll get away with this and thus games can be very dangerous if players are performing violent actions off the ball. Therefore, the rules successfulness depends on the level and technology at which the event took place.

Kit and equipment

The link to law 4- player's equipment is below.

http://www.thefa.com/football-rules-governance/lawsandrules/laws/football-11-11/law-4---the-players-equipment

Kit requirements for football are:

Shirt- sleeves must come at least half way between shoulder and elbow.

Shorts

Football socks

Shin pads

No jewellery

Football boots

Goalkeeper gloves (goal keepers only)

Also, teams must wear kits which don't have a colour clash, hence why teams have away and some have 3rd kits.

The kit ensure safety as for example if teams wore the same colour kits then you may think that someone near you is on your team so are not braced for contact if and when they attempt to tackle you. Thus there is a chance of injury as you don't expect a tackle or impact. This rule is therefore good and will prevent unfortunate injuries.

Another example of how kit keeps players safe is the use of shin pads. Often when a missed time tackle occurs there is contact at the lower leg area - shin. The shin pads protect the shins from any potential injury which could occur such as a broken tibia if someone connect with another payers shin. However, often shin pads are quite thin and only cover a small section of the leg, such as the middle half. This means that serious damage to the lower leg can occur as areas of the leg remain unprotected. In sports such as hockey, the shin pads are much larger and cover a larger surface area, usually from the base of the knee down to the ankle. This means that any contact made on the front of the leg shouldn't cause any injury. I think as a result that shin pads are a good rule but the rule should be developed to a minimum size for shin pads or advice from the FA should be given regarding the size of shin pads.

Jewellery is band during football matches as, if players wear things like neck chains or necklaces, they could potentially strangle a player and cause a very serious injury. For the same reason snoods were banned a few years ago. Plus there was a fear that players would grab on them and pull players back which could strangle an opposition player or cause nasty cuts. Also things like rings which can be quite sharp could dig into someone and thus cause a minor injury like a cut and shed blood.

A final example would be the use of football boots. There prevent injury as the studs/blades give players grip to prevent slipping on wet surfaces. These can prevent injuries that come from slipping such as muscles strains, tears, twisted ankle and more. Therefore the rules is good as other footwear such as normal trainer shoes will likely cause players to slip very often increasing the risk of the injuries mentioned above.

The rules regarding kit are usually enforced by either the referee or the forth official who inspect the players before matches or before substitutes enter the field. These officials will inspect each player and tell players to correct what is wrong with their kit. This rule is good as there is no possible way that a player will be allowed on the field with jewellery, without shin pads or with any I correct kit. The only potential issue is that if the referees/fourth official's inspection isn't good enough they miss a piece of jewellery which could go on to

hurt someone. However this very rarely happens as the inspections are usually carried out professionally and properly.

Equipment requirements for football are:

Goals tied down and nets which are tide back

Corner flags in properly and not broken

Referees whistle and cards

A perfectly spherical ball which is the correct size

Equipment ensure players safety as, for example, if the referee doesn't have their correct equipment like there whistle or cards then they would not be able to punish players for their actions as efficiently and wouldn't be able to intervene as quickly either. This is as with a whistle they can be heard anywhere on the pitch. Without this then fights or heated exchanges between players may go on for longer, increasing the risk of someone getting injured. In addition, if someone had had a severe injury such as a head injury, the referee can blow their whistle and indicate that treatment is needed for that players. I think that this rule is good as it means that punishment is given quickly as well as the officials being able to stop the game as quickly as possible when needed.

If the ball wasn't perfectly spherical then it could bounce in ways unexpected to a player. This could cause players to tear tendons or sprain/strain something as they are being made to twist change direction quickly. Plus if the ball is too big and heavy for players, often an issue with very young children, then it could lead to serious feet or head injuries when kicking or heading the ball. I think this rule is important as it prevents any unnecessary injuries/ it is also dealt well as the officials will check the ball before the game and can swap balls during games if they become flat for example.

All of these rules regarding equipment will be checked by the match officials along with the rest of their pre-game checks. However they can be changed during the game too if necessary. As a result I think that these rules and correct and dealt with in the right way.

<u>Technology in football</u>

Goal line technology

Microphones between referees and assistants

Cameras and use of replay

Astroturf pitches (3G and 4G)

These reduce the risk of injury as firstly goal line technology will avoid any conflict over debateable goals which may or may not have crossed the line. If someone feels they have been wrongly not given a goal they may become angry causing them to lose control which

cause an injury through lack of concentration or showing anger at other players. For example going in for a late tackle or trying to get revenge and potentially injure someone.

The main way technology reduce injury in football is through the use of microphones between official during games. With the headsets they can communicate to one another during the game. This means that they can confer about decisions and make sure that the referee didn't miss anything. Thus meaning that if an incident happened like a player punching someone behind the referee then the linesmen should see and therefore the punishment of a red card will be awarded. This reduces injury as it means that players know it's nearly impossible that they can commit an offence without retribution. However, if on the off chance that something is missed then the use of replay can be used after games to give people bans even after the game finished. This backs up the point that players know any crime they commit will be punished as there are always several pairs of eyes and cameras on them at all times.

Another way technology can reduce the risk of injury in football is that it means that players braking the rules, such as an off the ball incident not spotted by the officials, can be punished with a ban and or fine after the match which could suspend them for future matches.

The final way technology helps safety of football is the use of Astroturf pitches. They reduce injury as unlike a normal pitch it won't be covered in mud on a particularly rainy day. Therefore the slip hazard reduces as does the risk of injury. However, it can also be argued that these pitches are more painful when falling on them and can cause nasty cuts and grazes on the skin. Plus, the small black "rubber crumb" which is linked with causing cancer. This particularly a risk for goalkeepers who can often consume this "rubber crumb". Although it has not be fully proved, if it was to be proved then action would have to be taken. Therefore, although currently I'd say that 3g pitches should currently be allowed in football, potentially in the future they may not be.

P6 ✓

Emergency Action Plan- I Rounders Tournament

Emergency telephone numbers:

Emergency services- 999

school reception-

Event organiser ✓

My personal phone number·

Directions to the nearest hospital:

✓

Pictured above are the directions to the school. The postcode for the hospital is

Access points

The main access point for an ambulance is to turn off oad down the lane marked by the arrow on the picture below:

✓

Evacuation procedures

The evacuation procedures for the rounders tournament is to escort everyone up to the basketball courts beneath the sixth form block. This is labelled on the map by the black spot.

✓

Another important thing to do is to register evryone on arrival and ensure that when an evacuation occurs, the register is used to ensure that noone has gone mising. This means that everyone will get to the basketball courts safely.

P7 ✓
M3 ✓

The role of different agencies in the treatment and rehabilitation of sports Injuries

P7 & M3

There are multiple different agencies in order to treat and rehabilitate sports injuries. They vary in terms of long and short term treatment and depend on the severity of the injury to whether it is necessary.

A first aider is someone who is qualified to give first aid treatment in the event of an injury or illness.

https://www.redcrossfirstaidtraining.co.uk/Courses/First-aid-legal-requirements/Choosing-first-aider-appointed-person.aspx This was taken on 05/12/16 ✓

The main role of a first aider is to deliver immediate care and preserve life. However, it is not always so important, usually, it is just to ensure that the pain is reduced and there are no risks of further injuries or injuries becoming more severe. Plus, they are there to comfort and reassure the injured person and to try and keep them calm. In more severe injuries they give as much basic help as possible before more advanced aid arrives, like an ambulance with doctors and advanced technical equipment. It's vital that at any large gathering of people, particularly in sport, there are first aiders on hand to give help. Otherwise, the wait victims have before help will increase and that could lead people to get more serious injury or potentially die. Hence why they are so important as in serious cases the difference between life and death can be matter of minutes. ✓ Explored

A doctor is someone who is qualified to treat the injured or ill. The main role of the doctor is to examine and diagnose patients in order to make them better. This could involve prescribing patients with medicine such as painkillers in order to get rid of pain. This in order to maintain the patients mental and physical health. Without a doctor then patients could never get better and conditions or injuries could deteriorate. For example, if someone gets a broken bone and it isn't treated by a doctor and applied with a cast then it may never repair and could get further damaged causing considerably more pain to the patient. Plus, it could lead the patient never being able to return to playing sport again. ✓

scription & more ✓ (P7)

Physiotherapists treat patients through physical methods such as massage, heat treatment and exercise. This aids patient by restoring movement and function to an injured area. They do this by getting patients to complete small movements or exercises, however, occasionally they just give patients advice or manual therapy as a way of restoring movement of an area or reducing the risk of injuries occurring again. They are important as they speed up the recovery time and help people start to get back to life prior to the injury. For example, an athlete would have a physiotherapist to run them through exercises and gradually increase the intensity of the injury until they are ready to get back into training, performing and so on.

A psychologist is an expert in psychology. This will aid patients as they aim to improve the mental wellbeing of patients, rather than physically. This can help injured people as, particularly if the injury is serious, they could be ruled out of doing any sport for a long time. As a result, people can feel depressed about not doing their sport and missing friends. Therefore, a psychologist's job is to try and relax the patient and improve their mental state. Thus reducing stress too. Psychologists are important as they have to ensure that the mental well being of the patient is well, even when the

physical well being may not be. Plus they need to ensure that athletes that maybe depressed through injury don't do anything they shouldn't such as self harm and in disastrous scenarios suicide which can happen when people experience sever cases of depression.

Surgeons are qualified to practise surgery. This aids patients as they carry out surgery, often to help recover injuries. For example, very bad broken bones may require surgery in order to repair or rebuild bones. This will then reduce the time needed to recover from the injury and ensure that when the injury is extremely serious that people can actually recover from the injury. Hence the importance of surgery, without it, injuries may never recover and serious damage can occur.

Chiropractor- a chiropractor is someone who uses their hands to treat disorders of the bones, muscles and joints. The role of the chiropractor is a practise which helps with diagnosis, treatment and prevents disorders of the muscular-skeletal system. They are particularly associated with helping people with problems with the spine, such as lower neck and back pain. For example, massaging the lower back if someone had a nasty fall and damaged the lower spine, such as the lumbar vertebrae. Chiropractors are important as is it very important that the alignment of the spine is uninhibited as that would affect the nervous system which, if damaged, can have large consequences. Chiropractors help ensure that the spine stays aligned and therefore no serious damage can be done.

Explanation & importance of each professional MB

Links

For short term injuries, such as concussion, all that is likely to be needed is a first aider on site. Therefore, no links between other agencies can be made. However, when moving onto medium term injuries, another agency is required.

A first aider's role links to a doctors as they both deal with care usually shortly after the incident has occurred. For example, with a sprain, both give advice on how to treat the injury. For example, first aider's give the example of RICE and doctors are likely to advise or even prescribe some over the counter paracetemol. However, they differ in the sense that a first aider has less equipment, such as crutches or a plaster which will be available for doctors. In summary, doctors are more focused on the short term healing of the injury whereas doctors will focus on how long the injury will last and when to start sport again and so on.

For a long term injury, multiple more agencies are required. Firstly, a first aider is once again required. And again likely to be followed by a doctor. For a compound fracture, a first aide is likely to try and reduce any immediate swelling and attempt to reduce any pain which maybe felt for the patient. Plus, reassuring the patient at the time.

This differs to a doctor who is likely to give the patient painkillers immediately. If the bone if obviously piercing the skin the they are likely to advise you straight to a surgeon who lead from there. If it is not obvious, then the doctor will run an x-ray scan to ensure it is broken. This shows the difference in technology between a first aider and doctor.

This links nicely onto a surgeon as they are the next step on from dealing with a doctor. Like the doctor, they are likely to give painkillers but is likely to be something stronger like an anaesthetic before surgery. Then they will operate on the fractured bone and if all goes well, starts the road to recovery. This will then link back to the doctors who will apply some sort of plaster/cast on the area to protect it and ensure the bone stays in place.

Once this has occurred, a physiotherapist will then give the patient certain exercises to help build up the muscles around the affected area which are likely to have been affected during the break. ✓

With the physical side of the injury more or less dealt with, this leads the psychological potentially needing help. Therefore, a psychologist is used to ensure the mental well being. This is similar to a first aider as at the time of the incident they need to help keep the patient from stress and calm. The psychologist does similar but on a longer time scale. ✓

P8 ✓ P9 ✓

P8: Describe the different types of treatment that can be used to support the rehabilitation of sports injuries.

RICE:

Rest – it's important that after suffering an injury that you don't not rush into exercise immediately, as your body needs time to rest.

Ice – Ice will help reduced the swelling of the affected area after injury, although it's important to do this for around 10-20 minutes. Wrap the ice pack in a towel to avoid it directly touching your skin and causing an ice burn.

Compression – You want to wrap the area in order to reduce swelling but not too tight as that may cause increased swelling and potentially cause ice burn.

Elevation – you lift the affected area above your heart so it will reduce swelling.

Injuries that RICE can be used for:

There are multiple different injuries which can be treated by the RICE treatment, some are listed below:

Hamstring injuries

Heel pain

Torn ligament

Sprains and strains

Shoulder pain

Tennis/golfers elbow

Tendonitis

Advantages of RICE treatment

Rice has several advantages including pain relief, reduces swelling and it's easy to do as can be done anywhere, rather than having to travel somewhere to get treatment. For example, resting can be done as home as well as ice wrapped in a towel, manually apply pressure to

the area and being able to lift the affected area in the air, for example lifting your2 leg up in the air.

Disadvantages

Despite its advantages, it is not without its disadvantages, which include things such as burning the skin if applied to long or without anything between the skin and the ice, can cause muscle spasms and it can only be used for muscular injuries.

✓RICE P8

Hot/ Cold/Contrast bathing

Contrast bathing is treatment where affected areas or in some cases the whole body is immersed in hot water before the process being repeated in ice cold water. This process is repeated multiple times. Hot water is used as it causes blood vessels to dilate meaning increased blood supply and extra nutrients to help repair muscles and increase the rate in which tissues are rebuilt.

Injuries it treats include muscle soreness, swelling, mild sprains and joint injuries.

Advantages

There are several advantages to hot/cold contrast bathing.

The benefits of heat are that it improves the compliance of soft tissue as well as relieving pain. Heat can also warm up stiff or scared muscle before exercise, reducing pain and the chance of the injury reoccurring during exercise. A final advantage of heat is that it is very useful in the treatment of lower neck and upper back injuries.

Benefits to the ice water bathing is that it can decrease the amount of pain, muscle spasms and swelling on affected areas. It is particularly beneficial when used after exercise or activity which causes pain, for example after running a marathon, it would greatly reduce pain in the legs.

Disadvantages

Disadvantages of heat is that it can increase the amount of swelling and inflammation which is likely to cause pain and be uncomfortable. Plus if the water is too hot or the body is emerged in the water for too long, burns can occur. ✓

Disadvantages of ice is that if someone is in there for too long then frostbite can occur.

Immobilisation

Immobilisation is when a joint or a bone is held in lace with a splint, sling or a cast which prevents the injured or broken area from being damaged further and thusly slowing the rate of recovery, as a result the affected area won't be able to return to its normal; state as quickly.

Casts help reduce the pain of the injured area by not allowing any movement. Thus this is particularly useful for impact injuries such as dislocations and torn tendons. They also help realign the bone until it is back to its original position.

Different types of immobilisation will treat different injuries and have different functions.

Casts are generally used for broken bones and will prevent any movement at all around joints. Whereas slings will be used just for ensuring no more damaged is caused and will do less serious injuries such as small fractures and sprains. However they can also be deployed in emergencies before more suitable immobilisation is available. For example first aid for someone who has broken their arm. ✓

Anti Inflammatory Drugs.

These drugs are used to simply reduce any swelling/inflammation and pain as well as reducing the time it takes for recovery. The most common example of an anti inflammatory is ibuprofen.

They can be used for any injury which involves some kind of swelling, inflammation or pain. An example would be a sprain.

Advantages

The advantages of anti inflammatory drugs are that they reduce pain and swelling as well as the fact that, due to them being prescription drugs, you are able to take them home and use them, without any travel costs other than picking them up in the first place.

Disadvantages

There are only two main disadvantages to anti inflammatory drugs. Firstly that can make injuries worse as they mask injuries, therefore performers may, without realising, further damage their injury. Secondly is that, like most drugs, they can become addictive and if so, it can lead to the thinning of blood.

Rehabilitation

Rehabilitation is the way we regain our full usage after injury. This involves a mixture of flexibility and strength restoration. This occurs through multiple types of intensity and style of exercise which then rebuild joints to how they were previously.

Most injuries will need rehabilitation afterwards, however depending on the type and severity of the injury, the type of rehabilitation as well as the time it takes and intensity will differ between injuries. For example a broken tibia will need more work than a strain/sprain.

Advantages

There are 3 main advantages to rehabilitation. Firstly there is that it will speed up the recovery time until the injured area has fully recovered. Secondly it reduces the risk of the injury reoccurring as well as reducing the pain of the injury.

Disadvantages

There are only two real disadvantages of note to rehabilitation. Firstly it is that through poor technique, exercising too often too soon or too hard then it can aggravate injury or cause a new injury. The only other disadvantage to rehabilitation is that it can cost a lot of money. Even just basic physiotherapy costs money, particularly added with travel costs. Plus, unique physiotherapy can cost a tremendous amount of money, like hydrotherapy rehabilitation which requires a pool and higher qualified physiotherapists.

Phases of injury and rehabilitation P9

There are 5 main phases of rehabilitation.

Acute

The acute phase of the injury is likely to take just 1-5 days depending on the injury. In this phase the priority is to reduce the swelling as well as maintaining the range of movement. Some examples of this would be to use the RICE treatment or anti-inflammatory drugs.

Sub-Acute

This phase is likely to take between 1 and 3 weeks. This is once the swelling has reduced meaning that work on strengthening and flexibility of the injured area can begin. An example of this would be specific stretching of muscles around the joint. ✓

Remodelling

The remodelling stage of rehabilitation is likely to take a minimum of two weeks, but can take up to 7 weeks. This is the phase where isometric exercises can begin with the individual not feeling pain. An isometric contraction is a contraction with no muscle movement, for example holding a squat position for a long time (phantom chair). Plus eccentric and concentric contractions can also now begin, for example squats. ✓

Functional

The final two phases of rehabilitation can take up to 6 months. The functional phase however, can only take up to 2 weeks, depending on the type and severity of the injury. During this phase, weight baring exercise can begin to be introduced to an individual's rehabilitation programme. An example for a broken radius, could involve bicep curls with a small weight. ✓

Return to play

3 weeks to 6months is needed for the returning to play stage of rehabilitation. This phase includes beginning to perform warm up activities and potentially involved in practise sessions but it's important that there is no contact. Gradually, the intensity can increase with eventually including contact. For example just passing a football or simple ball drills if the sport is football. ✓

(P9) ✓ Description & phases & treatment

P1D M4 D2

Unit 17: Sports Injuries

Treatment and Rehabilitation Programme

Client Information:

The patient is and is 5'8 weighing around 9 ½ stone.

The patient has serious hay fever, particularly in the spring and summer months. However due to it being winter, it not as big a factor. They have no known allergies which need to be noted of. The only other previous injury was a fractured shoulder after a foul in a football match.

The patient has participated in lots of sport, particularly football from the age of 4 till current and briefly competed at area cross country. Therefore, he has a high level of fitness.

Injury Overview:

The suspected injury is a grade 3 sprained ankle. It happened in a football match going in for a fifty-fifty tackle. Due to the force of the tackle the ankle rolled badly which caused a very severe sprain. The symptoms of the injury include immediate throbbing pain, pain that intensifies with activity and decreases with rest as well as swelling, bruising, tenderness deformity and difficulty with any sort of movement or weight baring. For example simply walking normally can cause a lot of pain.

Guy enjoys most sports and particularly enjoys cardiovascular fitness training. However Guy does not enjoy cycling and therefore would much rather do swimming as a form of non-weight baring exercise. Plus, he is happy to perform exercises at home in his own time in the early rehabilitation stages. It's also important to mention that he does not like any kind of weight lifting/training.

Treatment:

The first aid treatment given at the time was the RICE treatment as well as anti-inflammatory drugs. This was to reduce the swelling around the ankle. Also they prevented any movement at the area by telling Guy not to move before getting to A&E. This reduced the pain and the amount of swelling around his ankle.

Rehabilitation:

Stage 1: Acute Stage

The acute stage will be the first week since getting injured and the main goal is to reduce swelling as well as maintaining movement at the joint. The two examples of this style treatment are the RICE (Rest, Ice, Compression and Elevation) treatment and anti-inflammatory drugs.

For this stage it's important to start off with protecting the ankle. This can be done through a removable cast or taping the ankle.

Secondly you should go through the RICE treatment:

Rest the area and ensure the ankle isn't put under any pressure. Therefore it is advised to use a crutch to promote ambulation. This is important as further use of the ankle would cause more injury as the area has not had time to recover.

Ice should then be applied however possible, whether it be an ice pack or just ice wrapped in cloth. The ice stage of RICE needs to be done as it reduces the swelling of the join that arises from these kinds of injuries. However ensure that the ice is not in direct contact with the skin to prevent irritation of the skin.

Compression can then be done by wrapping the ankle with elastic wrap. This also key for the client at this stage as like with the ice stage, it reduces swelling which can lead to the ankle feeling better sooner. A couple of examples of what and how to do this is below:


Finally elevation is when you keep your ankle above your heart. For example lying in bed or a sofa and resting your foot on a cushion or two to elevate the area. This decreases blood flow and therefore decreases inflammation and swelling, which helps reduce the pain of the ankle.

It is also advised that until the end of the early rehab stage removable boots are worn to ensure that no further damage occurs. Plus doctors may ask you to use crutches for the first week just to make sure that the ankle is not put under any sort of pressure or weight baring exercise.

Stage 2: Sub-Acute Stage

The sub-acute stage will be from day 7-21 (2 weeks).

Firstly, during this phase you should have a contrast bath once a day- a short ice bath and a hot bath after. This will help decrease the pain and increase the swelling around the ankle joint.

Now for this phase you can begin to perform isometric contractions. To do this, you need to contract against a force to prevent movement but still get your muscles in use due to them contracting. The four exercises pictured below will contract the different muscles around the ankle.




For each contraction you should contract for 2 seconds and relax for 2 seconds. Each one should be performed 10 times 5 times a day. If there is pain, you should either reduce the force at which you perform the exercise, or postpone it 2-3 days and try again. As well as this, after 2 weeks of these exercises you should increase the number you do. So 20 repartitions 5 times for the final day, rather than the previous 10. This will show that the joint as fully recovered. If you do not have the appropriate equipment to perform these exercises, you can use a cushion rather than a ball or someone acting as the resistance rather than the elastic tape.

During the second phase of treatment, the goal is to improve flexibility and strength at the joint occurs.

These exercises are specific for the client as they are building the muscles around the ankle which is where the damage occurred to Guy. They are measurable as by the end of the two weeks, you should be able to perform

the final amount of repetitions with maximum intensity and for there to be no pain associated with it. If pain is felt then this stage must be continued an extra few days before moving on. It is also very achievable as Guy just needs to be patient and follow the instructions for the pain to reduce enough to start to perform eccentric and concentric contractions. Also it is very realistic for Guy to do as he just needs to basic everyday objects for him to perform these activities. Plus the timings for guy is 2 weeks at this stage.

These activities should be okay for Guy as he was happy to perform exercise in his own time at home which is what this stage requires.

Stage 3: Remodelling/ Early Rehab (14 days- 42 days)

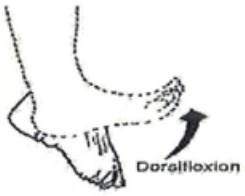
This period should last 3 weeks, so if the other stages have been on time, day 15- 42.

In this period non weight baring exercises should be introduced.

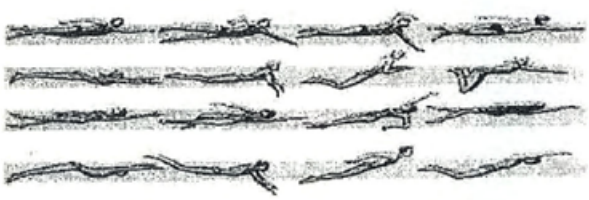
Goals for this stage are for Guy to be able to swim lengths of each different swimming technique freely. This is specific for Guy and his ankle as the movements are still focused around this joint and rebuilding the strength and gaining the flexibility and movement around of it. It is measurable as Guy just needs to be able to swim at least one length of each stroke to know his ankle has recovered. However I recommend a full week of this to strengthen his muscles. It's achievable as due to the prior weeks, his ankle will have recovered enough to begin exercising and his muscles will have gained strength.

Examples of exercises to go alongside the swimming would be plantar flexion/dorsi flexion, foot circles and inversion and eversion. It's important that during all of these exercises to perform them gently. Gradually apply more force over time, ensuring however, there is no pain. If there is pain, reduce the force of the movement. If pain continues to persist despite this, revert back to just doing isometric contractions for a couple more days before trying once more. I have chosen these specific exercises as they are non- weightbearing exercises but with movement. This helps regain the flexibility and strength of the joint and gets it accustomed to moving again.

(b) Inversion and eversion



Each exercise should be done gently for 10 repetitions 3 times a day for the first week of this stage. Then, try and increase the force at which you do them, although if there is any sign of pain, go back to doing each exercise gently. As well as increasing the intensity of each repetition, also increase the number of repetitions. Rather, you should do 20 reps, 3 times a day. By the end of this week (week 2) you should be able to do lots of reps forcefully and freely. The final part is to start swimming, along with the exercises. Swimming once a day for a week will help rebuild both strength and flexibility of the muscles and the joint. It's important to try different strokes which involve different movements. For swimming, you should do the following:



2 lengths front crawl

2 lengths breast stroke

2 lengths back stroke

2 lengths butterfly (or dolphin if it is easier)

If Guy feels physically this is too tough, just do 1 length of each. Plus, it's important to know that the speed of the swim is not important, just the technique and the movement at the ankle joint during each of the strokes.

I feel that Guy will enjoy this stage of the rehabilitation as he expressed his enjoyment for swimming.

Stage 4: Functional/ Late Rehab (14 days- 6 months)

This stage of rehab should take 4 weeks in total.

During this stage, the goal is to rebuild the strength of the muscles as well as being able to perform weight bearing exercise such as walking and running as you would prior to the injury. The end goal, is to be able to sprint at maximum intensity for 10 seconds. This is specific as it shows that Guy's ankle can withstand maximum weight baring exercise. It's measurable as it needs Guy to sprint for 10 seconds. Guy should be able to do it as he will have had weeks of weight baring exercise prior to this. Plus he has the time of 4 weeks of this stage to do it.

The first thing to be done in this stage is to walk around normally with no pain. For the first week, while walking around the house unaided as much as possible, try doing step-ups as a form of weight baring exercise 1 x 20 repetitions a day. This can be done on stairs or benches if you don't have the equipment in image shown.

I chose this exericise as it applies pressure and movement to the ankle joint which will strenthen the mucles around the joint.

As well as this in the first week, try and do exercises such as the quadriceps stretch pictured but bounce off your tip toes while maintain balance. This exercise is good for the client as it will help them regain their balance back but also continuing the strengthening of the ankle muscles for the same reasons as the prior exercise does (weight baring movements). Do these also 1x 20 a day.

Please note that before and after strenuous exercise, complete an appropriate warm up and cool down. They should include a very slow pulse raiser as well as stretching.

If you're fully comfortable with this, you can then move onto light jogging. I would suggest for the first week just do 10 minutes at a very gentle pace, around 3-4 mph if on a treadmill. If after this week there is no pain you can then move up to 15 –20 minutes for the next week. Also, increase the speed by a couple of mph, so 5-6 mph. As a result the force on the ankle will increase but it should be able to withstand this if the previous training has been followed correctly. As well as this it will help regain your fitness.

After the three weeks of jogging, you should attempt some very short sprints. For example, after a 10 minutes jog, do a 5 second sprint at maximum intensity. However if any pain or discomfort is felt at any point stop sprinting immediately and rest for the rest of the day. For the next few days, continue with the jogging before starting sprinting again. Gradually build up the time sprinting until on the final day of the 4th week sprint for 10 whole seconds.

This reflects Guy's likes and dislikes as he enjoys cardiovascular fitness which is prevalent in this stage of rehabilitation.

Stage 5: Return to play (3 weeks- 6 months)

The goal for this stage is to make an appearance in a competitive football match. This is specific as Guy's aim is to return to football as quickly as possible. It is measurable as I have set a target of 4 weeks for guy to break back into the team. It's achievable as Guy was a regular in the squad prior to the injury and therefore f he is able to return to his ability prior to the injury he should have the ability to do so. It's realistic as 3 team training sessions should help him regain his match sharpness and return him to playing alongside his colleagues. There is also a 4 week time limit.

Firstly it's important to start off with some basic skill and drills practises. For example, alone just practicing ball juggling, kicking (passing and shooting) a ball and running with a ball at your feet. This will just make sure that even with a force (the ball) there is no pain.

For a week, you should go out and do none contact training at a low intensity.

5 minute ball juggling- this will help get used to having a ball at your feet again and will gradually improve your touch to how it was before the injury.

This should be followed by a simple dribbling drill. Line up a line of 5 cones with a 3 yard gap between each one. Simply dribble in and out of each cone there and back twice. Do this at a gentle pace.

Finally, against a wall, player or goal, hit 10 shots with the inside of your foot, 10 with the lace part of the boot, before repeating with the other foot. To advance a drill add a target to aim for to test for accuracy.

45

Do these drills once a day for a week, however gradually increase the speed and power of each drill the more confident you become throughout the week. For example, for the dribbling drill, have a time target. To start have 30 seconds, before everyday reducing that time by 2 seconds. So eventually aiming for around 16 seconds. This will shows progression and increase the intensity of the training which will prepare you for competitive training.

I chose these 3 activities for Guy as after the injury he will take time to return to his prior ability. Therefore he needs to work on the main aspects of football, ball control, dribbling and passing/shooting. The first activity will get the client used to having a football at his feet as well as regaining his coordination. The second activity will work on the ability to run with the ball and change direction with the ball under control. Finally the third drill is there just to test that Guy can still kick a ball powerfully with no pain. there is no other way of testing this than doing it. Plus it will help Guy regain the accuracy of his passing and shooting. I chose these 3 drills as anyone will be able to complete baring they have the basic equipment.

Justified M4

Once you have done this noncontact training, you should then return to your scheduled team practise. Here it is important that you take it slowly and give time for you to fully regain your match fitness and sharpness. Therefore give it a few weeks before playing a competitive match. Although you may be fully fit, it will be the manager's choice in the end regarding the exact time you will get your first appearance, I expect however it will be after 3 training session (which are once a week). Although I would suggest that during this time to keep up regular jogging to maintain fitness levels.

Evaluation of the treatment and rehabilitation programme:

The first issue which may arise from the training programme is that Guy is unable to get to the gym. This is particularly important when regarding the swimming sections of the programme. A substitute for this could be cycling to school/college or just a bike ride around home. Although Guy did outline that he didn't enjoy cycling, if it is only for a few days it should not be too bad. Another option would be to do more foot movement exercises such as the plantar and dorsi flexion. Rather than doing the sets 3 times a day, he could increase to 5.

Another issue which may occur while training is if Guy were to get ill. If this happens early in the rehabilitation programme the client should still be able to perform the exercises for this stage. However if he were to get ill from stage 3 onwards, we would have no choice but to delay the training programme, before picking up where we left off once Guy has recovered from the illness.

A final issue which may arise from the training programme would be for Guy to get bored during the exercises and stop doing them. For the early stages of rehab at home I don't think this will be an issue as they are exercise that can be done while doing something else. For example, you can do them while watching tv, studying or even when eating, thus they should not be too difficult to be completed. If Guy gets bored later in the stage, like when running, the client can try tennis. This can be played at a friendly, steady pace so that guy will only have to jog around the court, or at a very quick high intensity pace where Guy will be sprinting quite often. Tennis is more enjoyable than running and would give Guy more enjoyment if he were to get bored.

Anticipation + explanation & potential problems

12

Unit 17: Sports Injuries

Treatment and Rehabilitation Programme

Client Information:

The patient is is 5'8 weighing around 9 ½ stone.

The patient has serious hay fever, particularly in the spring and summer months. However due to it being winter, it not as big a factor. They have no known allergies which need to be noted of. The only other previous injury was a fractured shoulder after a foul in a football match.

The patient has participated in lots of sport, particularly football from the age of 4 till current and briefly competed at area cross country. Therefore, he has a high level of fitness.

Injury Overview:

The suspected injury is a grade 3 sprained ankle. It happened in a football match going in for a fifty-fifty tackle. Due to the force of the tackle the ankle rolled badly which caused a very severe sprain. The symptoms of the injury include immediate throbbing pain, pain that intensifies with activity and decreases with rest as well as swelling, bruising, tenderness deformity and difficulty with any sort of movement or weight baring. For example simply walking normally can cause a lot of pain.

Guy enjoys most sports and particularly enjoys cardiovascular fitness training. However Guy does not enjoy cycling and therefore would much rather do swimming as a form of non-weight baring exercise. Plus, he is happy to perform exercises at home in his own time in the early rehabilitation stages. It's also important to mention that he does not like any kind of weight lifting/training.

Treatment:

The first aid treatment given at the time was the RICE treatment as well as anti-inflammatory drugs. This was to reduce the swelling around the ankle. Also they prevented any movement at the area by telling Guy not to move before getting to A&E. This reduced the pain and the amount of swelling around his ankle.

Rehabilitation:

<u>Stage 1: Acute Stage</u>

The acute stage will be the first week since getting injured and the main goal is to reduce swelling as well as maintaining movement at the joint. The two examples of this style treatment are the RICE (Rest, Ice, Compression and Elevation) treatment and anti-inflammatory drugs.

For this stage it's important to start off with protecting the ankle. This can be done through a removable cast or taping the ankle.

Secondly you should go through the RICE treatment:

167

Rest the area and ensure the ankle isn't put under any pressure. Therefore it is advised to use a crutch to promote ambulation. This is important as further use of the ankle would cause more injury as the area has not had time to recover.

Ice should then be applied however possible, whether it be an ice pack or just ice wrapped in cloth. The ice stage of RICE needs to be done as it reduces the swelling of the join that arises from these kinds of injuries. However ensure that the ice is not in direct contact with the skin to prevent irritation of the skin.

Compression can then be done by wrapping the ankle with elastic wrap. This also key for the client at this stage as like with the ice stage, it reduces swelling which can lead to the ankle feeling better sooner. A couple of examples of what and how to do this is below:

Finally elevation is when you keep your ankle above your heart. For example lying in bed or a sofa and resting your foot on a cushion or two to elevate the area. This decreases blood flow and therefore decreases inflammation and swelling, which helps reduce the pain of the ankle.

It is also advised that until the end of the early rehab stage removable boots are worn to ensure that no further damage occurs. Plus doctors may ask you to use crutches for the first week just to make sure that the ankle is not put under any sort of pressure or weight baring exercise.

Stage 2: Sub-Acute Stage

The sub-acute stage will be from day 7-21 (2 weeks).

Firstly, during this phase you should have a contrast bath once a day- a short ice bath and a hot bath after. This will help decrease the pain and increase the swelling around the ankle joint.

Now for this phase you can begin to perform isometric contractions. To do this, you need to contract against a force to prevent movement but still get your muscles in use due to them contracting. The four exercises pictured below will contract the different muscles around the ankle.

For each contraction you should contract for 2 seconds and relax for 2 seconds. Each one should be performed 10 times 5 times a day. If there is pain, you should either reduce the force at which you perform the exercise, or postpone it 2-3 days and try again. As well as this, after 2 weeks of these exercises you should increase the number you do. So 20 repetitions 5 times for the final day, rather than the previous 10. This will show that the joint has fully recovered. If you do not have the appropriate equipment to perform these exercises, you can use a cushion rather than a ball or someone acting as the resistance rather than the elastic tape.

During the second phase of treatment, the goal is to improve flexibility and strength at the joint occurs.

These exercises are specific for the client as they are building the muscles around the ankle which is where the damage occurred to Guy. They are measurable as by the end of the two weeks, you should be able to perform

the final amount of repetitions with maximum intensity and for there to be no pain associated with it. If pain is felt then this stage must be continued an extra few days before moving on. It is also very achievable as Guy just needs to be patient and follow the instructions for the pain to reduce enough to start to perform eccentric and concentric contractions. Also it is very realistic for Guy to do as he just needs to basic everyday objects for him to perform these activities. Plus the timings for guy is 2 weeks at this stage.

These activities should be okay for Guy as he was happy to perform exercise in his own time at home which is what this stage requires.

Stage 3: Remodelling/ Early Rehab (14 days- 42 days)

This period should last 3 weeks, so if the other stages have been on time, day 15- 42.

In this period non weight baring exercises should be introduced.

Goals for this stage are for Guy to be able to swim lengths of each different swimming technique freely. This is specific for Guy and his ankle as the movements are still focused around this joint and rebuilding the strength and gaining the flexibility and movement around of it. It is measurable as Guy just needs to be able to swim at least one length of each stroke to know his ankle has recovered. However I recommend a full week of this to strengthen his muscles. It's achievable as due to the prior weeks, his ankle will have recovered enough to begin exercising and his muscles will have gained strength.

Examples of exercises to go alongside the swimming would be plantar flexion/dorsi flexion, foot circles and inversion and eversion. It's important that during all of these exercises to perform them gently. Gradually apply more force over time, ensuring however, there is no pain. If there is pain, reduce the force of the movement. If pain continues to persist despite this, revert back to just doing isometric contractions for a couple more days before trying once more. I have chosen these specific exercises as they are non- weightbearing exercises but with movement. This helps regain the flexibility and strength of the joint and gets it accustomed to moving again.

(b) Inversion and eversion

Each exercise should be done gently for 10 repetitions 3 times a day for the first week of this stage. Then, try and increase the force at which you do them, although if there is any sign of pain, go back to doing each exercise gently. As well as increasing the intensity of each repetition, also increase the number of repetitions. Rather, you should do 20 reps, 3 times a day. By the end of this week (week 2) you should be able to do lots of reps forcefully and freely. The final part is to start swimming, along with the exercises. Swimming once a day for a week will help rebuild both strength and flexibility of the muscles and the joint. It's important to try different strokes which involve different movements. For swimming, you should do the following:

2 lengths front crawl

2 lengths breast stroke

2 lengths back stroke

40

2 lengths butterfly (or dolphin if it is easier)

If Guy feels physically this is too tough, just do 1 length of each. Plus, it's important to know that the speed of the swim is not important, just the technique and the movement at the ankle joint during each of the strokes.

I feel that Guy will enjoy this stage of the rehabilitation as he expressed his enjoyment for swimming.

Stage 4: Functional/ Late Rehab (14 days- 6 months)

This stage of rehab should take 4 weeks in total.

During this stage, the goal is to rebuild the strength of the muscles as well as being able to perform weight bearing exercise such as walking and running as you would prior to the injury. The end goal, is to be able to sprint at maximum intensity for 10 seconds. This is specific as it shows that Guy's ankle can withstand maximum weight baring exercise. It's measurable as it needs Guy to sprint for 10 seconds. Guy should be able to do it as he will have had weeks of weight baring exercise prior to this. Plus he has the time of 4 weeks of this stage to do it.

The first thing to be done in this stage is to walk around normally with no pain. For the first week, while walking around the house unaided as much as possible, try doing step-ups as a form of weight baring exercise 1 x 20 repetitions a day. This can be done on stairs or benches if you don't have the equipment in image shown.

I chose this exericise as it applies pressure and movement to the ankle joint which will strenthen the mucles around the joint.

As well as this in the first week, try and do exercises such as the quadriceps stretch pictured but bounce off your tip toes while maintain balance. This exercise is good for the client as it will help them regain their balance back but also continuing the strengthening of the ankle muscles for the same reasons as the prior exercise does (weight baring movements). Do these also 1x 20 a day.

Please note that before and after strenuous exercise, complete an appropriate warm up and cool down. They should include a very slow pulse raiser as well as stretching.

If you're fully comfortable with this, you can then move onto light jogging. I would suggest for the first week just do 10 minutes at a very gentle pace, around 3-4 mph if on a treadmill. If after this week there is no pain you can then move up to 15 –20 minutes for the next week. Also, increase the speed by a couple of mph, so 5-6 mph. As a result the force on the ankle will increase but it should be able to withstand this if the previous training has been followed correctly. As well as this it will help regain your fitness.

After the three weeks of jogging, you should attempt some very short sprints. For example, after a 10 minutes jog, do a 5 second sprint at maximum intensity. However if any pain or discomfort is felt at any point stop sprinting immediately and rest for the rest of the day. For the next few days, continue with the jogging before starting sprinting again. Gradually build up the time sprinting until on the final day of the 4th week sprint for 10 whole seconds.

This reflects Guy's likes and dislikes as he enjoys cardiovascular fitness which is prevalent in this stage of rehabilitation.

Stage 5: Return to play (3 weeks- 6 months)

The goal for this stage is to make an appearance in a competitive football match. This is specific as Guy's aim is to return to football as quickly as possible. It is measurable as I have set a target of 4 weeks for guy to break back into the team. It's achievable as Guy was a regular in the squad prior to the injury and therefore if he is able to return to his ability prior to the injury he should have the ability to do so. It's realistic as 3 team training sessions should help him regain his match sharpness and return him to playing alongside his colleagues. There is also a 4 week time limit.

Firstly it's important to start off with some basic skill and drills practises. For example, alone just practicing ball juggling, kicking (passing and shooting) a ball and running with a ball at your feet. This will just make sure that even with a force (the ball) there is no pain.

For a week, you should go out and do none contact training at a low intensity.

5 minute ball juggling- this will help get used to having a ball at your feet again and will gradually improve your touch to how it was before the injury.

This should be followed by a simple dribbling drill. Line up a line of 5 cones with a 3 yard gap between each one. Simply dribble in and out of each cone there and back twice. Do this at a gentle pace.

Finally, against a wall, player or goal, hit 10 shots with the inside of your foot, 10 with the lace part of the boot, before repeating with the other foot. To advance a drill add a target to aim for to test for accuracy.

Do these drills once a day for a week, however gradually increase the speed and power of each drill the more confident you become throughout the week. For example, for the dribbling drill, have a time target. To start have 30 seconds, before everyday reducing that time by 2 seconds. So eventually aiming for around 16 seconds. This will shows progression and increase the intensity of the training which will prepare you for competitive training.

I chose these 3 activities for Guy as after the injury he will take time to return to his prior ability. Therefore he needs to work on the main aspects of football, ball control, dribbling and passing/shooting. The first activity will get the client used to having a football at his feet as well as regaining his coordination. The second activity will work on the ability to run with the ball and change direction with the ball under control. Finally the third drill is there just to test that Guy can still kick a ball powerfully with no pain, there is no other way of testing this than actually doing it. Plus it will help Guy regain the accuracy of his passing and shooting. I chose these 3 drills as anyone will be able to complete baring they have the basic equipment.

Once you have done this noncontact training, you should then return to your scheduled team practise. Here it is important that you take it slowly and give time for you to fully regain your match fitness and sharpness. Therefore give it a few weeks before playing a competitive match. Although you may be fully fit, it will be the manager's choice in the end regarding the exact time you will get your first appearance, I expect however it will be after 3 training session (which are once a week). Although I would suggest that during this time to keep up regular jogging to maintain fitness levels.

Evaluation of the treatment and rehabilitation programme:

The first issue which may arise from the training programme is that Guy is unable to get to the gym. This is particularly important when regarding the swimming sections of the programme. A substitute for this could be cycling to school/college or just a bike ride around home. Although Guy did outline that he didn't enjoy cycling, if it is only for a few days it should not be too bad. Another option would be to do more foot movement exercises such as the plantar and dorsi flexion. Rather than doing the sets 3 times a day, he could increase to 5.

Another issue which may occur while training is if Guy were to get ill. If this happens early in the rehabilitation programme the client should still be able to perform the exercises for this stage. However if he were to get ill from stage 3 onwards, we would have no choice but to delay the training programme, before picking up where we left off once Guy has recovered from the illness.

A final issue which may arise from the training programme would be for Guy to get bored during the exercises and stop doing them. For the early stages of rehab at home I don't think this will be an issue as they are exercise that can be done while doing something else. For example, you can do them while watching tv, studying or even when eating, thus they should not be too difficult to be completed. If Guy gets bored later in the stage, like when running, the client can try tennis. This can be played at a friendly, steady pace so that guy will only have to jog around the court, or at a very quick high intensity pace where Guy will be sprinting quite often. Tennis is more enjoyable than running and would give Guy more enjoyment if he were to get bored.

The small print

OCR Resources: *the small print*

OCR's resources are provided to support the delivery of OCR qualifications, but in no way constitute an endorsed teaching method that is required by OCR. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources. We update our resources on a regular basis, so please check the OCR website to ensure you have the most up to date version.

This resource may be freely copied and distributed, as long as the OCR logo and this small print remain intact and OCR is acknowledged as the originator of this work.

Our documents are updated over time. Whilst every effort is made to check all documents, there may be contradictions between published support and the specification, therefore please use the information on the latest specification at all times. Where changes are made to specifications these will be indicated within the document, there will be a new version number indicated, and a summary of the changes. If you do notice a discrepancy between the specification and a resource please contact us at: resources.feedback@ocr.org.uk.

OCR acknowledges the use of the following content: N/A

Whether you already offer OCR qualifications, are new to OCR, or are considering switching from your current provider/awarding organisation, you can request more information by completing the Expression of Interest form which can be found here: www.ocr.org.uk/expression-of-interest

Please get in touch if you want to discuss the accessibility of resources we offer to support delivery of our qualifications: resources.feedback@ocr.org.uk

Looking for a resource?

There is now a quick and easy search tool to help find **free** resources for your qualification:

www.ocr.org.uk/i-want-to/find-resources/

www.ocr.org.uk

OCR Customer Support Centre

Vocational qualifications

Telephone 02476 851509
Facsimile 02476 851633
Email vocational.qualifications@ocr.org.uk

OCR is part of Cambridge Assessment, a department of the University of Cambridge. *For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored.*

Cambridge Assessment

CERTIFIED ISO 9001 UKAS MANAGEMENT SYSTEMS 001