

Athlete ACL Rehabilitation Committee

Debate Topic: Are there situations where athletes should elect to avoid mid-season Anterior Cruciate Ligament (ACL) surgery in favour of conservative treatment and physiotherapy?

Injuries to the anterior cruciate ligament (ACL) are one of the most common knee injuries sustained world-wide, particularly amongst athletes. An injury to the ACL leaves the ligament either excessively stretched out and lax, partially torn, or in most cases- fully ruptures. Because the ACL is an important stabilizer for the knee joint, many athletes report being unable to perform sharp cuts and pivots or engage in jumping activities after sustaining ACL injuries which is why surgery to reconstruct a new ACL is largely suggested for athletes who have sustained ACL injuries.

Despite reconstruction surgery being the widely advocated option for athletes who have sustained ACL surgeries, more and more athletes have gone on to compete while treating ACL injuries in a conservative manner. In some instances, the stretching or tear may be minimal enough that it does not significantly hinder an athlete's abilities; in other cases surrounding muscles –such as the quadriceps and hamstrings– can compensate for stability deficiencies within the knee.

ACL surgeries typically take 6-12 months to recover and return to play from, which means that undergoing this surgery in the middle or beginning of the season will take the athlete out for the entirety of the season. Conservative treatment on the other hand can have an athlete back to play in a matter of weeks, depending on how the athlete responds to treatment. While ACL surgery takes longer to recover from, it also completely reconstructs the ligament and eliminates a tear or stretching in a way that conservative treatment usually cannot do, the question is if this reconstruction is always necessary.

Foreword

Dear Stakeholders,

Hello and welcome to this CurisCaseStudies conference, we are very excited to have you as part of the Athlete ACL Rehabilitation conference! ACL injuries are unfortunately an extremely common injury across the world of athletics, often leaving athletes unable to play for a whole season at a time. With sports becoming increasingly competitive across the globe, there is often more pressure placed on getting athletes back into the game as soon as possible after injury. Rehabilitating an injured athlete is very much a team effort, and requires collaboration from many different stakeholders.

The basis of this committee is to build on the work of innovative ACL injury research, medical recommendations, and individual athlete experiences and anecdotes. For information regarding the specific issues addressed by this committee along with any relevant character descriptions, please refer to the background guide provided on pages 3-4.

The goal of this committee is to determine if there are situations in which it would be appropriate for an athlete to forgo mid-season ACL reconstruction surgery in favor of conservative treatment.

Good luck,

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Stakeholder Descriptions

When an athlete becomes injured, it takes a whole team of people to determine and execute the best course of action to get the athlete back to participating in sport. The people involved in this work have different roles, different perspectives to share, and sometimes different interests in mind. Despite these differences, all the perspectives must come together to agree upon and enact the best course of action to rehabilitate the injured athlete effectively.

Coach, Athlete & Performance Team

1. Head Coach

It's no question that this injury is a brutal loss to the team. We are only about three weeks into the season sitting at a 3-3 record, and no win has come easy. We want to make a real push in the playoffs this year, but it'll take a miracle if our star player has to sit out for the year after ACL surgery. If there's any way at all to get this athlete back by playoffs, we will absolutely take it. It might be one of our only shots at winning.

2. Injured Athlete

I've never experienced anything like this before in my life. My knee blew up on me like a balloon and is the most swollen I've ever seen. It's been two days now, and I couldn't walk at all without crutches when it first happened, but now I can take small steps and put more weight on my bad knee. I can extend my knee just fine but can hardly bend it at all. All I want to do is to be able to play and play as soon as possible. I know my team needs me, but I'm also a little bit scared. I don't want to hurt myself even more

3. Strength and Conditioning Coach

It's always very tough when an athlete gets injured, injuries can be extremely difficult to navigate. Keeping the body strong and conditioned is extremely important for athletes, even when injured; the challenge is to figure out how to strengthen the athlete without hurting them more knowing that the injured knee cannot meet the same demands that it used to prior to injury.

Sports Medicine Team

4. Primary Care Sports Medicine Physician

The MRI shows a tear of the ACL, although it is observed as a grade 2 or partial tear and there is no damage to the surrounding structures of the knee. This could make every difference or no difference depending on the individual. Some patients report copious amounts of instability with a partial tear, while others report no feelings of instability at all with a partial tear.

5. Orthopaedic Surgeon

If there is any tear at all, the ligament is eligible to be reconstructed, particularly in the case of athletes. Competing with any kind of tear in the knee naturally makes the knee more susceptible to more injuries potentially to the same ligament, or other structures of the knee. The challenge is that by bypassing surgery for a torn ACL of any degree, you run the risk of potentially having to undergo surgery for multiple structures of the knee later down the line.

6. Team Athletic Therapist

Regardless of if surgery is opted for or not, the athlete will have to complete physical therapy to restore range of motion and strength. It's still early to tell what the stability will be like after undergoing physical therapy, but in either scenario the athlete will have to go through pretty rigorous physical therapy.

Insurance Considerations

7. Coaches Insurance Coverage

Protecting coaches can sometimes be an expensive endeavour. With winning as a priority, sometimes the full health of athletes takes a backseat in favor of shortcuts that get the athlete back in the game sooner. It's a tricky situation, coaches typically have to put up winning records to be considered successful and keep their jobs, but it is still risky to play a partially injured athletes hoping that the team will win and that the athlete will not sustain further injury

8. Doctor and Athletic Therapist Insurance Coverage

The biggest thing here would be to avoid medical malpractice and negligence. The doctors and athletic therapist should make the athlete aware of the risks of both the surgical and conservative treatment options, and enact proper care –in line with the standard of reasonable care– in either situation. Decisions should be made based on the severity of the injury, the athlete's comfort and pain levels, and athlete's ability. While patients may choose to go against medical advice (AMA), standard and duty of care must be performed by medical professionals throughout the entirety of the process

Guiding Questions:

WITHIN-SECTOR DEBATE QUESTION (BY SECTOR)

Coach, Athlete & Performance Team

- What adjustments can a coach make if any to protect an athlete that is playing with an injury? Consider the nature of any team sport, what factors are in a coach's control in regards to protecting players?
- Do the values of protecting a player and winning games interfere with each other? If so, when and how?
- What are some exercise modifications that a strength and conditioning coach can make to help an athlete with a partial ACL tear continue to be strong and conditioned without causing further injury?
- What can an athlete do to protect themselves in a game when they know they are dealing with an injury? Does this conflict with their ability to play? Is it worth it to help the team win a championship but sustain further injury along the way?

Sports Medicine Team

- To what extent should the coach's and athlete's desires be considered when assessing if a player should undergo season ending surgery or not? Should the assessment be made from a purely medical standpoint?
- What are some ways that the athlete can avoid sustaining further injury if they choose to opt for conservative treatment in order to still be able to play during the season?
- What are some signs that should be looked for to determine whether an athlete will need to undergo reconstruction surgery or not? Should the athlete ultimately undergo surgery no matter what and just decide if they will do it during the season or in the off-season?

Insurance Considerations

- If coaches are asked to provide certain modifications for the athletes (e.g minutes restrictions), how can those things be enforced? If not always adhered to, is there any situation where the coach would not be held liable to failure to adhere to modifications and restrictions?
- What does maintaining proper standard and duty of care look like if the athlete decides to forgo surgery and if the athlete opts for surgery?

Guiding Questions:

CROSS-SECTOR DEBATE QUESTION

Are there situations where athletes should elect to avoid mid-season Anterior Cruciate Ligament (surgery) in favour of conservative treatment and physiotherapy?

- **If yes:** Propose three situations in which it would be appropriate for a player to avoid mid-season surgery in favour of conservative treatment. Be sure to include details on how the decision is determined and the specific protocol –if any– that the athlete will have to face for the remainder of the season and the offseason
- **If no:** Outline a set of guidelines for why an athlete should opt for surgery when sustaining any kind of tear to their ACL. Be sure to detail what the advantages of undergoing surgery are, regardless of the degree of the ACL tear, and note the risks involved in choosing to avoid mid-season surgery.