

Steroid Use, Football, and Catastrophic Injuries: The Paradox of Performance-Enhancing Drug Use

Curtis Fogel^{1,*}

¹ Lakehead University, Orillia, Ontario, Canada.

* Corresponding author.

Received 15 December 2011; accepted 22 February 2012.

Abstract

Recent evidence suggests that in Canadian football there is widespread performance-enhancing drugs use. In this paper, a paradox of performance-enhancing drug use is explored, which centers on the notion that football players might face greater risks of injury if they use steroids but greater risks of injury if they do not. This study examines media files, Canadian legal case files, semi-directed interviews with football players and administrators across Canada, autobiographies of professional football players, and various institutional texts involved in disciplinary cases in junior, university, and professional football in Canada.

Key words: Performance-enhancing Drugs; Steroids; Canadian Football; Sport Policy

.....
Curtis Fogel (2012). Steroid Use, Football, and Catastrophic Injuries: The Paradox of Performance-Enhancing Drug Use. *Studies in Sociology of Science*, 3(1), 12-16. Available from: URL: <http://www.cscanada.net/index.php/sss/article/view/j.sss.1923018420120301.2990>
DOI: <http://dx.doi.org/10.3968/j.sss.1923018420120301.2990>
.....

INTRODUCTION

Two recent cases have gained significant media attention pertaining to performance-enhancing drug use in Canadian football. First, the University of Waterloo football program in Canada was suspended for the 2010-2011 season following the positive test of nine football players (McElroy, 2010). After the arrest of a team player for steroid trafficking and possession, the Canadian Centre for Ethics in Sport (CCES) made an unprecedented move to test every player on the University of Waterloo football

team for the use of illicit performance-enhancers. Second, Canadian Football League player Jordan Matechuk was arrested and convicted for steroid possession (Edwards, 2011). While these two cases received significant media attention suggesting isolated incidents of steroid use in Canadian football, the results of this study indicate that performance-enhancing drug use is widespread in Canadian football. In fact, 59 out of 59 players interviewed in this study reported to use some form of performance-enhancing drug.

This paper will examine the prevalence and paradox of performance-enhancing drug use in Canadian football. While, performance-enhancers can make athletes bigger, stronger, and faster, they also carry increased risk of certain injuries and health complications for users. Performance-enhancers also place others at risk of catastrophic injuries from the impact with stronger, faster chemically augmented athletes in open field contact. Given this, not using performance enhancers can also have increased health risks in Canadian football. The end result is a paradox where athletes might be at greater risk of injury if they use performance enhancers, but might also be at greater risk of injury if they do not.

Much of the existing research on performance-enhancing drug use in Canadian sports focuses on ethics of steroid use in amateur and professional sport (Beamish & Ritchie, 2006; Boudreau & Konzak, 1991; Kirkwood, 2009), the possible health consequences of use (Koziris, 2007; Sirois, 2003; Uzych, 1992), social consequences of use (Hoaken & Stewart, 2003; Vanhelder, 1991), body image and use (Blouin & Goldfield, 1995; Goldfield, 2009), statistical prevalence of use (Melia et al., 1996). This research study builds on this literature, particularly by making a unique contribution to research on prevalence and health issues of performance-enhancing drug use in sports.

DEFINING PERFORMANCE-ENHANCING DRUGS

Coakley and Donnelly (2009) suggest that defining performance-enhancing substances is a difficult task, as anything from aspirin to heroin can be considered a performance enhancer. Defining performance-enhancing drugs is made increasingly difficult as “physicians, pharmacists, chemists, inventors, and athletes continue to develop new and different aids to performance” (Coakley and Donnelly, 2009, p. 172). The definition of performance-enhancing drug use used in this study was developed in accordance with the Controlled Drugs and Substances Act (CDSA) and the Canadian Policy Against Doping in Sport (2004).

The CDSA only recognizes one category of performance-enhancers, which they term “anabolic steroids”. These include: Oxymetholone, Stanozolol, Nandrolone, Methandrostenolone, Oxandrolone, Boldenone, Methenolone, Mesterolone, Testosterone Cypionate, Testosterone Enanthate, Testosterone Propionate, and Testosterone Undecanoate (Health Canada, 2000). In contrast, the Canadian Policy Against Doping in Sport (2004) uses a much broader definition of performance-enhancing drugs, which includes, but is not limited to: blood doping to enhance oxygen transfer, diuretics to mask steroid use, stimulants, and certain narcotics. This study relies on this broader conceptualization of performance-enhancing drug use, but specific attention is given to studying the prevalence and use of steroids.

According to the United States Anabolic Steroid Control Act of 2004, the term ‘anabolic steroid’ refers to “any drug or hormonal substance, chemically and pharmacologically related to testosterone” (p. 1). While no definition of the term anabolic steroid is provided in Canadian legal doctrine, the Controlled Drugs and Substances Act lists 43 different types of anabolic steroids and their derivatives that fall under legal control. Each of these drugs have been reported to have negative physiological effects on those who use them (Koziris, 2007; Sirois, 2003; Uzych, 1992; Jendrick, 2006; Skancke & Friedman, 2009; The Mitchell Report, 2008). Furthermore, the use of steroids is often not as simple as injecting a single substance into one’s body on a regular interval. American medical research into steroid use by athletes indicates that non-medically monitored steroid use often involves “stacking” and “cycling” (Taylor, 2002). Stacking refers to the use of several types of steroids simultaneously, while cycling involves taking large amounts of particular steroids in short intervals with periods of less use in between. The health risks associated with unregulated and unmonitored steroid use, as is customary in sport, are high.

PREVALENCE OF STEROID USE IN CANADIAN FOOTBALL

Players’ reports on the prevalence of illegal steroid use in Canadian football varied. None of the 59 players interviewed in this study reported that they had ever used steroids; however, every participant indicated that he knew at least one other football player who used illegal performance-enhancing drugs and all reported to use some form of performance-enhancer themselves. At the junior playing level, the vast majority of players reported that some players used steroids, but that most do not. A junior wide receiver affirmed: “I would probably guess less than a quarter of the league does them.” Likewise, a junior offensive lineman commented that: “There are guys out there who will use them, but most guys just think they are dumb because of the negative health effects and because it’s cheating.”

At the university level, players indicated a higher prevalence of steroid use than at the junior level. One university linebacker indicated that he knew at least fifteen university football players who were currently using illegal steroids. Likewise, a university quarterback noted that there are, “a lot of young steroid freaks playing university football in Canada.” Others, however, indicated that few players on their own team used any illegal performance-enhancing drugs. Most players did note suspicions that other teams had multiple players who were currently or had recently used steroids.

Reports by professional football players in Canada varied widely on the prevalence of steroid use. At one extreme, a professional offensive lineman noted: “You are not really sure most of the time... you always have your guesses of who is on what. I would say that a couple of guys that I have played with or against have used them.” A professional linebacker estimated that ten to twenty percent of CFL players had recently used some form of illegal steroid. Most reported that they were not able to give an estimate because of the secrecy of the act. For example, a CFL quarterback noted, “I don’t think that it is very prevalent but I am not naive enough to think that it is not there. I don’t know if I could put a percentage on it or anything like that.” At the other extreme, one professional player reported: “It is running rampant...people need to realize that it is not two guys over here doing it, but it is more like if you take one hundred professional football players, you will probably find that eighty-five have used some form of illegal supplement.” Another professional player who came to Canada after playing in a U.S. league alleged that: “Steroid use in the CFL is more prevalent than anywhere else I have seen, simply because there are no tests.”

Estimates of illegal steroid use in professional football by players in this study varied from one percent to eighty-five percent. While revealing little in the way of specific numbers, the reports of players do indicate that steroids

are being used to some extent in junior, university, and professional football in Canada. Combined with the results of the Waterloo tests revealing significant use in Canadian university football, it is clear that some men who compete in Canadian football are using steroids. This prevalence does not, however, appear to be as high as it once was in U.S. professional football where, according to Dave Meggyesy (1971):

The violent and brutal player that television viewers marvel over on Saturdays and Sundays is often a synthetic product...I saw players taking not only steroids, but also amphetamines and barbiturates at an astonishing rate...trainers do more dealing in these drugs than the average junky. (p. 73)

Meggyesy (1971) adds further: "Some pro teams dispense amphetamines and barbiturates like they were penny candy" (p. 91). The reports of football players interviewed in this study provide little evidence that illegal performance-enhancing drug use is anywhere near this prevalent in contemporary Canadian football.

THE PARADOX OF PERFORMANCE-ENHANCING DRUG USE

The use of performance-enhancing drugs enables a better consumer product on the field. Steroids and other enhancers can suspend and surpass the human body's natural limitations. Steroids allow users to have increased strength, speed, and agility, and faster recovery times from injuries. The use of steroids can help transform the body into a spectacle of power and aggression, which creates an interesting and entertaining product on the field that would not be possible otherwise.

According to one professional offensive lineman, steroid use is part of the big business of football:

What people have to realize is that the human body regardless of how well trained cannot do certain things. If you are 6'7 and 330lbs. there are certain things that you are not going to be able to do. Naturally, you should not be able to run a 4.7 40 and do all of the things that they do. The vast majority of those guys are on performance-enhancers whether it is steroids or growth hormones or amphetamines, all of that stuff... cocaine use, all of it. The reason why you will never hear owners bitch and complain is that it is way too big business... all of these fans are used to seeing a certain product on the field... guys are so fast and so strong. If they ever started to test for everything and got it to be a clean sport guys would not be as fast, guys would not be as big, they would not be as strong. You would not get the same kind of product on the field. People would lose interest.

From the perspective of this player, the CFL league office deliberately turns a blind eye to drug use because it allows for a better product on the field and more money in the pockets of team owners and league officials.

Despite the possible benefits and size, speed, and strength that steroids can bring, several players report an interesting paradox of using performance-enhancing drugs in Canadian football. On one hand, steroids could make

players bigger, stronger, and faster, which could protect them against a number of injuries that are common in the sport. On the other hand, steroids carry multiple health risks and could potentially heighten risks of injuries. One CFL offensive lineman noted: "The human body has limits. If you push past those limits, things are going to start breaking down." According to this player, the risk of injury that accompanies steroid use is that the body grows in size and strength too quickly so that other parts of the body, such as tendons and ligaments, cannot keep up. Players who are using steroids then face a greater risk for tendon and ligament tears, which can be career ending injuries.

However, several players who do not use steroids report concerns over being smaller and weaker than players who use steroids, which exposes them to risks of injury due to size and strength differentials. The paradox of performance-enhancing drug use for players is, then, that players are at a higher risk of injury if they do not use steroids, but they are at a higher risk of injury if they do. According to the majority of players across each playing level, if no players were using steroids then these risks of injury would be significantly reduced. However, as long as players are using steroids, then this paradox continues to exist.

One former professional football player describes the injuries he sustained as a result of violence on the field as follows:

I have a steel plate, 4 pins and 2 screws in my left ankle, torn my MCL in my right knee, a stress fracture in my right femur, I've broke both ankles, all of my fingers, ribs, slipped a disk, separated my left shoulder, bruised my tailbone ridiculously bad and it still bothers me to this day and that was six years go, and I have badly dislocated my elbow... your body hates you after.

This quote provides a common example of the catastrophic injury lists described by many football players. One player with a similar list was nicknamed "the zipper" to characterize all of the scars he has all over his body from surgeries requiring stitches.

It is not clear to what extent the injuries described above can be directly attributed to the use of steroids or other performance-enhancers. There is, however, strong evidence to suggest that football players are bigger and stronger than in previous years due to steroid use, which makes open field tackles and collisions even more dangerous. When this is combined with the potential dangers of using steroids, such as heightened risks of tendon and ligament damage, the sport becomes even more dangerous.

Commenting on this paradox, one player suggested that steroids are not a performance enhancer at all. He stated that: "steroids cause so much damage to the body and injuries from pushing the body past its natural limits that they end up limiting performance not enhancing it." In contrast, former professional football player Steve Courson (1991) describes his steroid use as follows: "I

took one tablet a day for 30 days. I ate like a pig and trained like a maniac. One month later, my weight went from 232 to 260 pounds, my dashes were the fastest times of my life, while my bench presses went up 50 pounds.” For Courson, steroids appear to serve as a definite performance-enhancer. However, he later required heart transplant surgery at the age of 33 after a career of heavy use of steroids and other performance enhancers.

INADEQUATE SOCIAL CONTROL OF STEROIDS IN CANADIAN FOOTBALL

Despite the risks of catastrophic injuries and health issues directly and indirectly related to performance-enhancing drug use, few measures have been taken to control their use. Until the 2011 season, the Canadian Football League did not have any disciplinary policies or procedures in place that pertained to performance-enhancing drug use. The CFL has remained one of the few professional sports leagues in North America that has not required any form of drug testing of its players. Commenting on the lack of drug testing in the CFL, World Anti-Doping Agency chair Dick Pound refers to the Canadian Football League as “a summer camp for NFL players who have been suspended for drug use” (in Barnes, 2006, p. 1).

At the encouragement of the Canadian Football League Players Association (CFLPA), the new collective agreement ratified in the summer of 2010 has made testing for steroid use on the agenda for the CFL. This testing began in 2011 with the support of the CCES. As stated in the current collective agreement, approximately 25% of CFL players will be tested at random each year. While no longer devoid of drug tests, the newly indoctrinated CFL drug policy remains somewhat lenient. Players receive a warning for the first time they test positive for steroid use, and a three-game suspension if they test positive a second time.

At the junior and university levels, similar disciplinary review processes are conducted for performance-enhancing drug use. At both levels, the Canadian Centre for Ethics in Sport (CCES) carries out drug testing. The CCES abides by provisions set out by the World Anti-Doping Agency (WADA), which took over responsibility for developing international standards and prohibitions of performance-enhancing drug use from the International Olympic Committee (IOC) in 1999. The national governing bodies for CJFL and CIS football support and enforce the disciplinary decisions of the CCES. The governing bodies also help the athlete who is facing disciplinary sanction for using a banned substance to understand the sanction and to file an appeal to the CCES. According to a university administrator who was interviewed for this study, teams who make the playoffs are tested more than teams at the bottom of the conference or regional standings. Typically, a single team will be

tested once during the season and have four to six players tested at that time.

Most of the players, across all three playing levels, reported that the drug testing policies and procedures in their leagues are ineffective and insufficient. According to the vast majority of players at the junior and university playing levels, the random drug tests conducted by the Canadian Centre for Ethics in Sport do little to curb performance-enhancing drug use because players realize how small the likelihood is that they will be selected for a test. On teams with over sixty players, only four to six players are typically selected for a drug test each year, and often no players are selected at all.

Beyond issues related to the limited number of players selected for drug tests in Canadian football, players also reported problems with the ease by which random drug tests can be beaten. A common concern, which was reported by approximately half of the players, was that the development of new drugs and cleansing agents allow players to use steroids without testing positive. According to one junior center: “The drug testers will just never be able to keep up to the drug takers... they are always just one step behind.” Other players noted inherent problems with the predictability of the drug tests. A university quarterback suggested that since players know their team will only be tested once during the year, they can just wait until their team has been tested, and then start taking steroids for the remainder of the season. Likewise, a university coach remarked: “If guys are going to cheat, they are probably smart enough to mask it and not get caught.” Whether any players actually engage in any such behaviour is not clear from this study as no players reported ever having manipulated a drug test. It appears that the effectiveness of league drug testing rests not only on conducting an adequate number of tests, but also making sure that the tests are effectively detecting those who are using illegal steroids.

CONCLUSION

The competitive demands of the sport of football are that players be big, strong, fast, and athletic. This combination of size and speed can be difficult to achieve as 300 pound men can typically not run as fast as 180 pound men. However, through the chemical augmentation of steroids, athletes are able to achieve athletic feats that they would not otherwise be able to do. A CJFL running back affirmed that for some players: “Steroids become a way to realize their dream.” However, there might be a high price to pay for using performance-enhancing drugs, and steroids in particular.

According to several players, if no players were using steroids then these risks of injury would be significantly less. However, as long as players are using steroids, then this paradox continues to exist creating a further

constraint for Canadian football players to negotiate when deciding whether or not to use performance-enhancing drugs. Players are pulled in one direction to be bigger, stronger, and less susceptible to injuries; however, they are simultaneously pushed in another direction by the damaging health consequences and the increased risk of certain injuries that can be attributed to steroid use.

REFERENCES

Anabolic Steroid Control Act of 2004. One Hundred Eighth Congress of the United States of America. <http://www.justice.gov>. Retrieved 2010-06-15.

Beamish, R., & Ritchie, I. (2006). *Fastest, Highest, Strongest: A Critique of High-Performance Sport*. New York: Routledge.

Blouin, A., & Goldfield, G. (1995). Body Image and Steroid Use in Male Bodybuilders. *International Journal of Eating Disorders*, 18(2), 159-165.

Boudreau, F., & Konzak, B. (1991). Ben Johnson and the Use of Steroids in Sport: Sociological and Ethical Considerations. *Canadian Journal of Sport Sciences*, 16(2), 88-98.

Coakley, J., & Donnelly, P. (2009). *Sports in Society: Issues and Controversies*. Toronto: McGraw-Hill.

Controlled Drugs and Substances Act. Available online at: <http://laws.justice.gc.ca/en/>.

Canadian Policy Against Doping in Sport. (2004). Available online at: <http://www.pch.gc.ca/>.

Courson, S. (1991). *False Glory*. Stamford, CT: Longmeadow Press.

Edwards, D. (June 9, 2011). No Investigation into Steroids Following Matechuk's Arrest. *Hamilton Spectator*. Available online at: www.thespec.com.

Goldfield, G. (2009). Body Image, Disordered Eating and Anabolic Steroid Use in Female Bodybuilders. *Eating Disorders: The Journal of Treatment & Prevention*, 17(3), 200-210.

Hoaken, P., & Stewart, S. (2003). Drugs of Abuse and the Elicitation of Human Aggressive Behaviour. *Addictive Behaviors*, 28(9), 1533-1554.

Jendrick, N. (2006). *Dunks, Doubles, Doping: How Steroids are Killing American Athletics*. Guilford, CT: Lyons Press.

Kirkwood, K. (2009). Considering Harm Reduction as the Future of Doping Control Policy in International Sport. *Quest*, 61(2), 180-190.

Koziris, L. P. (2007). Anabolic-androgenic Steroids. *Strength and Conditioning Journal*, 29, 74-75.

McElroy, J. (2010). Waterloo Steroid Scandal is Only Beginning. *McLean's*. Available online at: www.mcleans.ca.

Meggyesy, D. (1971). *Out of Their League*. New York: Paperback Library.

Melia, P., Pipe, A., & Greenberg, L. (1996). The Use of Anabolic-Androgenic Steroids by Canadian Students. *Clinical Journal of Sport Medicine*, 6, 9-14.

Sirois, F. (2003). Steroid Psychosis: A Review. *General Hospital Psychiatry*, 25, 27-33.

Skancce, J. L., & Friedman, L. S. (2009). *Athletes and Drug Use*. Detroit: Greenhaven Press.

Taylor, W. N. (2002). *Anabolic Steroids and the Athlete*. London: McFarland & Company.

The Mitchell Report. (2008). The Illegal Use of Steroids in Major League Baseball. Hearing before the Committee on Oversight and Government Reform, United States House of Representatives. Available online at: <http://www.gpoaccess.gov/congress/index.html>.

Uzych, L. (1992). Anabolic-androgenic Steroids and Psychiatric-Related Effects: A Review. *Canadian Journal of Psychiatry*, 37, 23-28.

Vanhelder, W. P., Kofman, E., & Tremblay, M. (1991). Anabolic-steroids in Sport. *Canadian Journal of Sport Sciences*, 16, 248-257.

Yesalis, Charles E. (2000). *Anabolic Steroids in Sport and Exercise*. Champaign, IL: Human Kinetics Publishers.