A Whole Different Ballgame . . . Or Is It?

Medical Malpractice and the Modern-Day Athlete

By Tara R. Di Luca

A 28-year-old marathon runner collapses and dies five-and-a-half miles into the U.S. Olympic men's marathon trials in New York City. A college football player in Tennessee receives two blows to the head, which result in brain injury. A professional boxer suffers a fatal head injury during a boxing match in New York City. A 21-year-old college lacrosse player in Pennsylvania suffers a fatal cardiac arrhythmia during practice. These all-too-familiar tragedies occur nationwide to athletes competing at all different levels, and who are from different ethnicities and different backgrounds. They are young, healthy and active individuals, promising stars, role models and mentors. These are stalwart athletes suffering sudden death. What happened? How did this happen? Why did this happen? Is anyone responsible? These seemingly simple questions become legal and medical anomalies, as families, friends, teammates and fans are left to piece together the medical and legal puzzle.

A topic of broadening interest in the legal realm of medical malpractice involves the standard of medical care given to an athlete by team physicians and athletic trainers in the setting of high school, collegiate and professional athletics. Ironically, given the amazing amount of public interest in sports, this area of law is very new, with many unresolved legal issues; it lacks any overwhelming legal precedence regarding physicians' potential malpractice in treating athletes.[1] For the cases that eventually did reach the courtroom, courts have applied general medical malpractice principles in actions brought against physicians and athletic trainers for alleged negligent medical treatment of athletic injuries.[2]

The Team Physician

Sports medicine is a relatively newly recognized subspecialty of medicine. Without confusing "newly" with "recognized," the origins of sports medicine date as far back as ancient Greece and Rome. However, it was not until the 1972 Summer Olympics in Munich that a true medical team accompanied a nation's athletes. Subsequently, other countries followed this Canadian "phenomenon" and assigned medical teams to their own Olympic athletes.

Sports medicine is a unique facet of the medical field, focusing on the prevention, diagnosis, and treatment of injuries in athletes. This field encompasses vast medical specialties. Team physicians are often specialists in areas such as family practice, internal medicine, ortho-

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pedic medicine, cardiovascular medicine or neurological medicine.[3]

Standard of Care

Before a defendant can be found liable for negligence, a duty must be found to exist between the tortfeasor and the plaintiff and a breach of that duty must occur, which breach proximately causes the plaintiff's injuries.[4] When a case presents allegations of medical malpractice against a team physician, a physician-patient relationship must be established first before the physician can be held liable for negligence. In *Scottland v. Duva Boxing*,[5] the court found that a physician-patient relationship was created where the defendants were retained as ringside physicians during a boxing match. In this capacity, they were charged with the duty to exercise reasonable medical care and to provide an ongoing medical diagnosis of the athlete's physical condition throughout the match. The court found that a boxer could reasonably expect that a ringside physician would call the match if necessary to protect his or her well-being and attend to any injuries the boxer sustained during the match. The physician's duty extended to monitoring the physical conditions of the boxing participants and practicing in accordance with good and accepted standards of medical care.

In *Kleinknecht v. Gettysburg College*,[6] the court found that a special relationship existed between the college and the athlete simply by the fact that the college had actively recruited the athlete to play lacrosse. The court found that this relationship created a duty to provide *prompt* emergency medical services to a lacrosse player who suffered a fatal arrhythmia.

Since an athlete's participation in college or professional athletics is relatively short, a team physician's main purpose should be to protect the health and safety of each individual athlete without the unnecessary restriction of athletic activity.[7] It is imperative that the interests of the individual athlete are balanced with the interests of the team as a whole. This balancing act requires that physicians be competent in preventing and treating injuries and in assessing whether and when an athlete is medically capable of returning to play. Specific duties of a team physician may include providing pre-season physical examinations, diagnosing, treating and rehabilitating athletic injuries, referring athletes to appropriate specialists if needed, providing medical clearance to athletes to play the sport and informing athletes of the risks involved when returning to play. Team physicians are subject to unique external pressures that may affect their ability to properly assess a particular athlete's condition. A physician's medical judgment must not be clouded by pressure from coaches, the team, school administration and even the injured athlete in assessing whether the athlete should be cleared to return to play.

In medical malpractice suits involving team physicians, the recent trend is to apply a national standard of medical care.[8] Courts have been hesitant to apply the traditional locality rule in favor of a more uniform national standard, reasoning that appropriate treatment should not vary with the geographic location of where the treatment is rendered. Athletic teams travel to different geographical locations, and it would be irrational to vary the standard of care an athlete receives as the team travels from state to state and from urban to suburban or rural areas.

Virtually instant universal access to technology and information sharing ensures that physicians have access to new and emerging medical developments. It is also important to acknowledge that some medical facilities in suburban or rural areas may not have the benefit of the latest, most sophisticated medical equipment or available specialists. However, a health care provider's lack of the latest equipment must be distinguished from a provider's failure to provide appropriate medical care by utilizing outdated treatment methods.[9]

Pre-Participation Physical Examinations

Team physicians are required by law to perform medical examinations of athletes to determine whether they are medically able to participate in a sport. An athlete's level of athletic experience could be a relevant factor in establishing whether a pre-participation physical examination is appropriate and reasonable. Professional and collegiate

athletes can expect to receive a more comprehensive exam than a high school athlete, given the strenuous physical demands on athletes at elite levels. There is no specific standard for pre-participation examinations and physical procedures.

Athletes alleging medical malpractice against sports medicine physicians often proceed on the theory that the physician was negligent in failing to discover latent injuries or physical defects.[10] In *Rosensweig v. State*,[11] the heirs of a boxing athlete who died after suffering a fatal head injury during a match claimed that the examining physicians were negligent in failing to discover the boxer's pre-existing brain injury.

The Appellate Division found that the pre-participation standard examination was appropriate and found no evidence of a brain injury or concussion.[12] In further support, the decedent's past medical history indicated no sign or symptom of any concussion or brain injury warranting any further evaluation. The examining physicians were not negligent because the decedent was provided with the customary pre-fight examination.

The court's decision in *Classen v. State*[15] was consistent with the appellate court's decision in *Rosensweig*. In *Classen*, the court similarly found that a physician who examined the athlete prior to his fight was not liable for malpractice because he had conducted an acceptable pre-participation physical and neurological examination of the boxer before clearing him to fight. The examination was deemed in accordance with standard accepted medical practices. However, in *Classen* the court held that the ringside physician could be held liable for failing to stop the boxing match where the boxer received several head blows leading to his death. The ringside physician had a duty to practice in accordance with good and accepted standards of medical care in determining whether the athlete should continue fighting.

Duty to Properly Diagnose and Treat

As with any medical care provider, team physicians have a duty to appropriately diagnose and treat an injured athlete. Expert testimony regarding the appropriate standard of sports medicine care is generally required to prove that the physician deviated from the appropriate standard. Included is the team physician's duty to conduct appropriate tests to determine the nature and severity of an athlete's particular condition. In *Gardner v. Holifield*,[16] a deceased athlete's cardiologist was held liable for failing to properly interpret two echocardiograms (ECGs) ordered to confirm an initial diagnosis of Marfan syndrome, which was made during a routine physical examination of that player.[17] The athlete died six months after the examination. The court in *Gardner* relied on expert testimony to prove medical malpractice.[18] Medical experts testified that a proper confirming diagnosis and treatment would have prevented the athlete's death and given him a normal life expectancy.

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The customary standard applied by the appellate court is in contrast to the alternative approach of defining the standard in terms of acceptable practice under the circumstances, given the nature of the sport of boxing and the associated risks. Evidently, this was the standard the trial court had applied.

The trial court in *Rosensweig* found the physicians had acted negligently because giving the athlete an electroencephalogram[13] and a standard pre-fight physical exam were negligent under the circumstances. (This author believes that the trial court probably took into consideration the innate nature of the sport, and the facts that the athlete was competing at an elite level and had received several blows to the head in previous fights.) Of course, expert medical testimony is essential in proving the acceptable standard of medical care. In *Rosensweig*, the appellate court refused to rely on expert medical testimony that, even though a standard examination found no evidence of a brain injury, good medical practice under these circumstances required the boxer to be withheld from fighting for two to six months due to the severe head beating he had received in a prior fight.[14] It appears that when a physician is presented with treating an athlete with a particular injury, what is considered customary may be an antiquated or outdated treatment and therefore the accepted practice standard seems to be more amenable to the current state of medicine.

Duty to Provide Proper Medical Clearance

A team physician has a duty to medically clear an athlete to return to play. This duty extends to the responsibility to refuse clearance of an athlete if there is a belief that there is a significant medical risk of harm from participation. A physician must keep the best interests of the athlete in mind in determining whether the athlete is capable of returning to play without succumbing to pressures from coaches, the administration, teammates and the injured athlete, because of the athlete's own desire to get back in the game. Athletes, by nature, are competitive and driven to succeed and most would rather play injured than "be

benched" or "red shirted" for fear of becoming the next Wally Pipp.[19]

Along with the duty to provide medical clearance, the team physician is required to inform the athlete of any material risks of playing a sport in light if his or her physical condition. In *Krueger v. San Francisco Forty Niners*,[20] a California intermediate appellate court held that a professional football team's conscious failure to inform a player that he risked a permanent knee injury by continuing to play was fraudulent concealment. The court found that the plaintiff was not informed by team physicians of the true nature and extent of his knee injuries, the consequences of steroid injection treatment or the long-term dangers associated with playing professional football with his medical condition. The purpose of this nondisclosure was to induce the athlete to continue playing football despite his injuries, thereby constituting fraud.

The Athletic Trainer

Athletic trainers have a duty to exercise reasonable care for the health and safety of student athletes.[21] An athletic trainer, as "gatekeeper," is perhaps the individual in the best position to assess an athlete's condition and report to the team physician, because the trainer is in constant contact with athletes on a daily basis. While recognizing that an athletic trainer is not a licensed physician, trainers nonetheless share many of the same duties as the team physician and may be found liable for the negligent care and treatment of an athlete. Athletic trainers are licensed in their respective states and hold themselves out to be professionals. Their legal duties may include properly assessing an athlete's condition, providing or obtaining proper medical treatment, providing medical clearance to participate and informing the athlete of the risks of athletic participation given a particular medical condition. Establishing the standard of care for athletic trainers in their treatment of athletes ordinarily requires expert testimony.[22]

An athletic trainer can be held liable for failing to refer an athlete to the proper specialist in a timely manner. In *Jarreau v. Orleans Parish School Board*,[23] a team trainer was found liable for failing to refer a football player to an orthopedist for his wrist injury until after the football season was over. The athletic trainer's failure to timely refer the athlete proximately caused permanent injury to the player's wrist.

Pinson v. State[24] is undoubtedly the leading case in setting legal precedence in sports medicine malpractice pertaining to the treatment of athletic injuries. The court recognized that a duty existed between an athletic trainer and an athlete, akin to that of a physician and athlete; the athletic trainer had a duty to report the plaintiff's neurological symptoms to the team physician and treating physician, and failure to do so proximately caused the plaintiff's injuries.

The plaintiff in *Pinson* was kicked in the head during football practice and collapsed unconscious. The athletic trainer failed to inform the emergency room physician about the neurological signs he had observed, including that the plaintiff had remained unconscious for about 10 minutes, had suffered palsy on the left side of his face and had no control of the left side of his body. Therefore, no CT scan was ordered. The plaintiff continued to complain of severe headaches in the days following his discharge. Additionally, the athletic trainer failed to inform the team physician of the plaintiff's continued headaches. The plaintiff was medically cleared by the team physician to return to play.[25] Soon after and during another practice, the plaintiff was kicked in the head a second time and collapsed unconscious. He underwent brain surgery, which revealed that he had sustained a chronic subdural hematoma of three to four weeks' duration as a result of the first blow. As a result of his injuries, the plaintiff remained hemiparetic and suffered from severe cognitive problems and frequent seizures; a shunt was placed to relieve fluid build-up in his brain.

The court found that the athletic trainer had a duty to report to the emergency room physician the neurological symptoms that the plaintiff had exhibited at the time of the first blow and to report the plaintiff's subsequent headaches to the team physician and treating physician. The failure to do so was the proximate cause of the plaintiff's injuries, the court found. *Pinson* expanded on the ruling in *Kleinknecht* that, as a college athlete, Pinson

not only enjoyed a special relationship with his college giving rise to a duty to provide prompt medical care, but the school also had a duty to provide *appropriate* medical treatment to athletes injured during regularly scheduled games or practices.

The New Rage

With the aid of physicians, trainers and coaches, news of steroid use has flooded recent headlines,[26] and brought to light many medical and legal consequences. But steroid use among athletes is not a new phenomenon. A few decades ago, in the 1976 Summer Olympic Games in Montreal, the world looked on in amazement as the East German women's swim team, otherwise known as "Wonder Girls," swept gold medal after gold medal in each of their respective events. Years later after investigations were commenced and lawsuits were filed, a former East German sports doctor admitted in a Berlin court that he had handed out anabolic steroids to coaches "as an official carrying out an order," suggesting that the order came from the doctors' commission in the national swimming association. He further testified that one of the association's doctors decided which athletes received the steroids. The coaches were then charged with administering the "little blue pills" to young female athletes as part of an East Germany state-sponsored campaign to attain athletic excellence.

Further testimony revealed that the girls were given the steroid, known as Oral-Turinabol, without their consent; they were told that the pills were vitamins. The fall of the Berlin Wall ushered in the end of the old system, and Stasi secret-police files were opened and confirmed the worst of suspicions, including details that some women were ordered to abort fetuses that might have been deformed by the drugs.[27] Years later, the women who were victims of the state-administered steroids came forward, testifying that they suffered from a host of illnesses, including ovarian cysts and other gynecological problems, cardiovascular difficulties, enlarged hearts, miscarriages, liver tumors and birth defects in their children.

A physician's duty to an athlete is to use due care not to increase the risks to a participant over and above those inherent in the sport.[28] The physicians who administered the steroids to these athletes knew or should have known that the use of steroids could cause severe injury. Legally speaking, at least under U.S. law, such conduct was clearly the proximate cause of the athletes' injuries. Morally speaking, such conduct went far beyond the bounds of illegality and was an ethical atrocity.

Quick Fixes

This leads to discussion of the use of cortisone injections and COX-2 non-steroidal anti-inflammatory medications (NSAIDs), such as Celebrex, for "quick fix, band-aid" treatments of athletic injuries.[29] There are few cases discussing athletic trainers' or physicians' improper dispersion of medications to athletes, but this does not mean it does not occur. Anyone who watched the movie *Varsity Blues* probably recalls the scene where the team's quarterback is manipulated by his coach and trainer into taking cortisone shots into an injured knee, which finally gives out. This scenario is all too real. In the case of *Krueger v. San Francisco Forty Niners*, discussed previously, the team physicians failed to inform the plaintiff of the effects of cortisone injections in his knee. The plaintiff suffered a permanent, career-ending injury.

For some athletes, these treatments become their security blanket and main source of pain relief. While cortisone works to reduce inflammation, repeated injections have the potential to produce deleterious effects. Cortisone injections can weaken tendons and break down cartilage, causing long-term, further damage.[30]

Physicians and athletic trainers should inform athletes of the risks associated with taking these medications and should not approve of these treatments without further evaluating or assessing the athlete's condition. In some situations, these treatments mask the seriousness of an injury, which can lead to further and permanent damage.

Dying to Win

Eating disorders among female athletes are very serious, potentially deadly and are estimated to afflict as high as 62% of collegiate female athletes.[31] A more accurate estimate is not readily made, as this silent epidemic is all-too-often undiagnosed, untreated and underreported. The most common eating disorders in female athletes are anorexia nervosa, bulimia and compulsive exercise. Eating disorders affect an athlete's body in devastating ways, leading to a host of consequences, including bone-density loss leading to osteoporosis, severe weight loss, potassium imbalance, stress fractures, cardiac arrest, and even death. There is virtually no case law addressing the issue of what duty, if any, a team physician has in identifying and treating an athlete presenting with an eating disorder. Simply because of their positions, athletic trainers and team physicians should be cognizant of the warning signs and symptoms of eating disorders, and should respond appropriately by referring the athletes for proper medical and mental health treatment.

Should the legal duty of a team physician and athletic trainer extend to recognizing the symptoms of eating disorders in athletes under their supervision? Do they have the duty to refer an athlete to a mental health provider for treatment? Do they have the duty to pull an athlete from competition or refuse to medically clear the athlete to participate to protect the athlete from further harming his or her health? These are legal questions that remain unanswered and elicit different responses from coaches, physicians and athletes themselves. Individuals with

eating disorders are often embarrassed and ashamed of their illnesses and take careful measures to hide their disorders from coaches, parents, teammates and health-care providers. Many deny that they have a disorder and therefore refuse to seek help.

The case of *Wattenbarger v. Cincinnati Reds*[32] might possibly shed some light on the legal duty of coaches, team physicians and athletic trainers to identify and treat athletes presenting with eating disorders. In *Wattenbarger*, the court held that the defendants had a duty to use due care not to increase the risks to a participant over and above those inherent in the sport. This duty extended to restricting participation by an injured player to avoid aggravating an injury, which included pre-existing injuries. Whether this general duty of care extended to restricting participation by an injured player to avoid aggravation of an injury became a question of foreseeability.

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The court in *Wattenbarger* relied on *Palsgraf v. Long Island R.R. Co.*,[33] and the elucidations of the Court that "[t]he risk reasonably to be perceived defines the duty to be obeyed."[34] The *Wattenbarger* court deemed it foreseeable that allowing the plaintiff to continue to pitch after he had informed the powers that be that his shoulder had "popped" would lead to further injury. In applying *Wattenbarger*'s extension of the duty of care, the argument can be made that a coach, physician, and athletic trainer each has a duty to protect an athlete with an eating disorder against further aggravation of the condition and against further aggravation of injuries associated with eating disorders such as heart problems, stress fractures, bone loss and even death. Aggravating these injuries is reasonably foreseeable when an athlete's body is severely weakened and deprived of nutrition as a result of the eating disorder.

Classen v. State was previously noted for its proposition that, in determining whether an athlete should continue participation, physicians have a duty to practice in accordance with good and accepted standards of medical care. Applying this standard to the duty owed to athletes with eating disorders, one could argue that team physicians have the duty to determine whether athletes with eating disorders should continue to participate or be pulled from competition.

The first step in establishing a duty is to train team physicians, athletic trainers and coaches to recognize the warning signs and symptoms of eating disorders. This duty should extend to referring athletes to appropriate health care providers and evaluating athletes' health before medically clearing them to participate in sports. Hopefully, this will raise the bar in setting a national standard of care regarding this issue.

The Future of Sports Medicine

Sports medicine is fast becoming a specialized area. There is a huge financial and personal incentive in rehabilitating athletes. An athlete's career is relatively short, financial stakes are high and fans eagerly await an athlete's return. While claims of medical malpractice brought by injured athletes only recently hit the litigation spotlight, medical recommendations published by the Bethesda Medical Conference[35] have been recognized in some cases as appropriate cardiovascular guidelines to be relied on by physicians when determining the fitness of an athlete for participation in a particular sport. Perhaps these guidelines will continue to be useful in resolving the legal issues regarding the standard of care in the area of sports medicine. Two examples follow.

In the case of *Knapp v. Northwestern University*,[36] a federal appellate court recognized the appropriateness of a physician's reliance on current consensus medical guidelines when making a recommendation for an athlete with a cardiovascular abnormality. The court upheld the university's legal right to accept the team physician's recommendation to medically disqualify a student-athlete from playing college basketball, which was consistent with the then-current 26th Bethesda Medical Conference guidelines. This case perhaps sets the legal precedent that a physician may justifiably rely upon the now-current 36th Bethesda Conference recommendations in determining the medical fitness of an athlete to participate in a sport, given the athlete's cardiovascular condition. The guidelines provide American Heart Association Panel recommendations for pre-participation athletic screening, including family history, personal history and physical examination.[37]

As discussed above in the case of *Gardner v. Holifield*,[38] a deceased athlete's cardiologist was held liable for failing to properly interpret two echocardiograms that were ordered during a routine physical examination to confirm an initial diagnosis of Marfan syndrome. According to the recommendations provided by the 36th Bethesda Conference, athletes with Marfan syndrome can participate in low and moderate static/low dynamic competitive sports if they do not have certain accompanying symptoms, as detailed in the guidelines. It would be worth investigating whether the physicians in *Gardner* considered the recommendations set forth by the Bethesda Conference and whether they determined that the plaintiff fell into the category of athletes that can compete despite Marfan syndrome.

In November 2007, 28-year-old distance runner Ryan Shay collapsed and died five-and-a-half miles into the U.S. Olympic men's marathon trials held in New York City. He had been diagnosed with an enlarged heart at age 14, but had been medically cleared to continue running. As the cause of Ryan's death still remains inconclusive, it will be interesting to establish what factors, criteria, and guidelines, if any, Shay's physicians considered in recommending that he be medically cleared to continue running, despite his condition. Hopefully, the recommendations provided by the Bethesda Conference will assist in creating judicial precedent and lead to the development of national standards of care regarding preparticipation screening for cardiovascular abnormalities in high school, collegiate and professional athletes.[39]

Conclusion

As the specialty of sports medicine continues to develop and become nationally recognized, team physicians, athletic trainers, and coaches should work together by sharing information with the goal of appropriately and timely diagnosing and treating injuries in their athletes. The best interests of their athletes should be at the forefront of any decision. ■

1. Matthew J. Mitten, *Emerging Legal Issues: A Synthesis, Summary, and Analysis*, 76 St. John's L. Rev. 5 (2002).

2. Many cases involving the alleged negligent care and treatment of an athlete either settle or are governed by collective bargaining agreements or workers' compensation statutes, and therefore never reach the courtroom.

3. Sports medicine has been recognized as a subspecialty of the American Board of Medical Specialties since 1989.

4. William L. Prosser, Prosser and Keeton on Torts (5th ed. 1984).

5. *Scottland v. Duva Boxing LLC*, 2005 N.Y. Misc. LEXIS 3513 (2005).

6. 989 F.2d 1360 (3d Cir. 1993) (student-athlete with no prior medical history of heart problems suffered cardiac arrest during lacrosse practice after developing cardiac arrhythmia).

7. Mathew J. Mitten, *Team Physicians and Competitive Athletes: Allocating Legal Responsibility for Athletic Injuries*, 55 U. Pitt. L. Rev. 129 (1993).

8. Mitten, *supra* note 1, at 11.

9. *Nowatske v. Osterloh*, 198 Wis. 2d 419, 543 N.W.2d 265 (1996), *overruled on other grounds by Nommensen v. Am. Cont'l Ins. Co.*, 246 Wis. 2d 132, 629 N.W.2d 301 (2001) (physician held liable where the treatment methods utilized were outdated).

10. Mitten, *supra*, note 1.

11. *Rosensweig v. State*, 5 N.Y.2d 404, 185 N.Y.S.2d 521 (1959).

12. *Rosensweig v. State*, 5 A.D.2d 293, 295, 171 N.Y.S.2d 912 (3d Dep't 1958).

13. An electroencephalogram, or EEG, is a test that measures and records the electrical activity of the brain.

14. *Rosensweig*, 5 A.D.2d at 295.

15. 137 Misc. 2d 489, 520 N.Y.S.2d 999 (Sup. Ct., N.Y. Co. 1987).

16. 639 So. 2d 652 (Fla. Dist. Ct. App. 1994).

17. Marfan syndrome is a connective tissue disorder, externally characterized by disproportionately long extremities, and internally characterized by weakened walls of the major arteries. This syndrome is among the most common congenital heart lesions that have been associated with sudden death during sports participation.

18. *Gardner*, 639 So. 2d at 656.

19. The legend is that Wally Pipp, who played first base for the Yankees, was replaced by Lou Gehrig when he sat out a game with a headache.

20. 234 Cal. Rptr. 579 (Cal. Ct. App. 1987).

21. *Searles v. Tr. of St. Joseph's Coll.*, 1997 Me. 128, 695 A.2d 1206 (1997) (existence of a duty involved the question of whether the defendant was under any obligation for the benefit of the particular plaintiff. The court found that the athletic trainer has the duty to conform to the standard of care required of an ordinary careful trainer).

22. *Id.*

23. 600 So. 2d 1389 (La. Ct. App. 1992).

24. No. 02A01-9409-BC-00210, 1995 WL 739820 (La. Ct. App. Dec. 12, 1995).

25. An interesting legal inquiry is whether the team physician should have physically examined the plaintiff himself before clearing him to return to play, rather than simply relying on what the athletic trainer told him.

26. Recent television and news headlines report allegations of steroid use by baseball's Barry Bonds, Jason Giambi, Roger Clemens, and Andy Pettitte, among others, and track and field athletes including Marion Jones and Tim Montgomery. In December 2007, the Mitchell Report was published, which was the result of an intensive independent investigation into the use of anabolic steroids and other performance-enhancing substances by major league baseball players. In total, 89 current and former major league players are named in the report and many are expected to testify before the House Committee on Oversight and Government Reform.

27. Steve Kettmann, *E. German Olympic Dopers Guilty* (July 18, 2000), *available at* http://www.wired.com/politics/law/news/2000/07/37631.

28. *Wattenbarger v. Cincinnati Reds, Inc.*, 28 Cal. App. 4th 746, 33 Cal. Rptr. 2d 732 (Cal. Ct. App. 1994) (the defendants were held liable where they allowed the plaintiff to continue to pitch and they knew or should have known that to continue would cause irreparable harm, and such conduct was the cause of the plaintiff's injuries. The defendants owed a duty to the participants not to increase the risks inherent in the sport).

29. COX-2 inhibiters selectively block COX-2 enzyme, which impedes the production of the prostaglandins that cause the pain and swelling of arthritis inflammation. Unlike the most common anti-inflammatory drugs like aspirin, ibuprofen, and naproxen, which act to block both COX-1 and COX-2 enzymes, COX-2 inhibitors act to selectively block only COX-2 enzyme. Cardiovascular risks have been shown in COX-2-specific inhibitors as prostaglandins are involved in regulation of blood pressure by the kidneys.

30. Tricia Stuart, *Long Road Ahead for Those With Knee Problems* (Mar. 30, 2005), *available at* http://www.uchc.edu/ocomm/newsarchive/news05/mar05/knee.html.

31. Simmons College Press Release, *Eating Disorders Among Female Athletes: Big Problem, Little Knowledge* (Mar. 12, 2002), *available at* http://www.simmons.edu/about/news/releases/2003/3_12_03_eatdisorders.shtml.

32. 28 Cal. App. 4th 746.

33. 248 N.Y. 339, 162 N.E. 99 (1928).

34. *Id.* at 344.

35. The Bethesda Conference is a medical conference that was created for the specific purpose of establishing consensus recommendations among cardiologists and sports medicine physicians regarding the eligibility of athletes with cardiovascular abnormalities to participate in sports. The now-current 36th Bethesda Conference was held on November 6, 2004.

36. 101 F.3d 473 (7th Cir. 1996).

37. The consensus recommends a physical examination consisting of evaluating athletes for heart murmurs, assessing femoral arterial pulses, identifying any stigmata of Marfan syndrome, and taking brachial blood pressure measurements. The guidelines also outline various cardiovascular abnormalities and provide recommendations regarding athletic participation in athletes with these conditions.

38. 639 So. 2d 652 (Fla. Dist. Ct. App. 1994).

39. Italy has a formal national pre-participation screening and medical clearance program in place, which mandates that young, competitive athletes in organized sports programs have annual examinations that include a 12-lead electrocardiogram, history and physical examination.