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EDITOR

Robert W. Battle

CONSULTING EDITOR

Mark D. Miller

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Legal and Ethical Issues in the Cardiovascular Care of Elite Athletes



Michael S. Emery, MD^{a,b,*}, Eric F. Quandt, JD^c

KEYWORDS

• Cardiovascular • Athletes • Legal • Ethics

KEY POINTS

- The courts generally recognize national guidelines as good medical practice; however, they are not conclusive evidence of the medical or legal standard of care.
- Temporary restriction and referral to a specialist is prudent when the suspicion of a cardiovascular condition arises.
- The ultimate decision on return to play is at the discretion of the team physician.
- The evaluation and management of a professional athlete has several distinct differences from a collegiate or high school athlete that may alter the athlete–physician relationship.

INTRODUCTION

There continues to be growing support for more specialized cardiovascular care of competitive and elite athletes. Most of this concerns the identification of an underlying, potentially asymptomatic cardiovascular condition that could place the unsuspecting athlete at risk for sudden cardiac arrest (SCA) or sudden cardiac death (SCD). Although these are rare events in athletes ranging from approximately 0.24 to 0.7 per 100,000 athlete-years^{1–3} to 1 in 44,000 per athlete-year in National Collegiate Athletic Association (NCAA) athletes,⁴ they are devastating to the athlete, their family, and the local community.

There are a variety of cardiac conditions responsible for SCA/SCD in athletes. These conditions differ depending on the age of the athlete with primarily unsuspected congenital cardiac conditions predominating in young athletes² and ischemic heart disease in older athletes.⁵ The American Heart Association (AHA) 14-point preparticipation history and physical⁶ and the fourth edition of the preparticipation physical evaluation (PPE) monograph⁷ are the standard in the United States for screening

^a Sports Cardiology Program, Greenville Health System, Greenville, SC, USA; ^b Department of Medicine, University of South Carolina School of Medicine Greenville, PO Box 8795, Greenville, SC 29604, USA; ^c Scharf Banks Marmor LLC, 333 West Wacker Drive, Suite 450, Chicago, IL 60606, USA

* Corresponding author. Sports Cardiology Program, Greenville Health System, Greenville, SC. E-mail address: docemery02@gmail.com

athletes for underlying cardiac conditions before participating in competitive athletics. Although adding an electrocardiogram (ECG) and/or an echocardiogram is controversial, it is being performed by multiple nonprofit organizations, universities, and professional leagues in the United States. Return to play for the athlete with either symptoms of potential cardiac disease, an abnormal screen (PPE and/or ECG) or with established cardiac disease have been outlined by the 36th Bethesda Guidelines,⁸ which have established legal precedence.

With the increasing presence of medical professionals in the cardiovascular care of athletes, there is a rising concern about the ethical and legal implications of screening, restricting, and disqualifying athletes. Whether this is at the youth/high school, collegiate, or professional levels, a number of considerations can be made.

UNDERSTANDING LEGAL STANDARDS

Providing health care to athletes raises the potential for liabilities and may represent a different patient population than the "average" cardiology patient. There is no national standard of care in providing professional medical services to athletes; therefore, health care providers should be aware of the standard of care applicable to them in their particular state as defined by the courts in that state and under applicable regulations and statutes. Although there exist common principles among the laws of each state, differences can arise. As a general proposition, licensed physicians are held to the standard of care of possessing and applying the knowledge ordinarily used by reasonably well-qualified physicians in providing professional services under same or similar circumstances. Additionally, individuals within a profession who specialize may be held to an even higher standard of care. Thus, professional negligence by a cardiologist may be determined by the failure to do something that a reasonably careful cardiologist would do under the same or similar circumstances. However, there is latitude in the scope of what may be reasonable under any specific set of circumstances because individualized clinical judgment plays a key role. Generally, a physician's responsibility is to conform to accepted, customary, or reasonable medical practice. Courts have recognized that guidelines established by national medical associations are evidence of good medical practice; however, they are not conclusive evidence of the medical or legal standard of care. Additionally, it is important to provide sports participation recommendations both from a short- and long-term perspective, congruent with an athlete's medical best interests.

"Good Samaritan" laws are statutes designed to protect individuals from civil liability for acting negligently while providing voluntary emergency care. From state to state, Good Samaritan laws vary greatly as to the categories of people protected and circumstances in which they apply. Most states only provide immunity for persons who render care in an emergency, at the scene of an emergency, and without compensation. Voluntarily providing medical services, such as performing ECG screening programs, probably would not meet the requisite criteria. In such cases, the physician should request coverage under an insurance policy for the voluntary services rendered.

EVIDENCE OF THE STANDARD

The determination of whether there exists a deviation from the standard of care, that is, professional negligence, will be made by the trier of fact, which could be a judge, but often is determined by a jury. The jury hears the evidence and then is given specific instructions from the judge. Generally, lay juries are instructed that they must consider the expert testimony from the professional health care witnesses on the stand in

making the determination of any deviation from the standard of care. In other words, such determinations are not made from their own knowledge and experiences. Hence, trials often revolve around the so-called battle of the experts. The opinions of the experts are based on their own education, knowledge, and experience in the relative field, but may also be based on published medical literature, bylaws, rules, regulations, policies, and procedures. The extent to which this evidence is adduced during trial can vary from state to state.

As an example, on the collegiate level, it is important to note the NCAA Sports Medicine Handbook.⁹ As stated in the preface, "appropriate care and treatment of student-athletes must be based on the clinical judgment of the institution's team physician or athletic health care team that is consistent with sound principles of sports medicine care. These recommendations provide guidance for an institution's athletics administrators and sports medicine staff in protecting student-athletes health and safety, but do not establish any rigid requirements that must be followed in all cases." This handbook consists of "guidelines...and guidelines may constitute some evidence of the legal standard of care."

Differences may apply at alternate levels of competition with some potential variability between high school, youth athletic leagues, and even professional sports. At the high school level, the National Federation of State High School Associations publishes its own Sports Medicine Handbook.¹⁰ The professional level is considerably more variable, not only between sports, but between individual teams within the same sport, and attention needs to be paid to those specific rules, regulations, policies, and procedures. This type of information not only might be used by the various independent expert witnesses at trial, but may also be used during the direct and cross-examination of the individual defendant physician on the witness stand.

ELITE ATHLETES VERSUS THE NORMAL PATIENT POPULATION

Consideration needs to be given to differences that may exist in providing professional medical services to an elite athlete as opposed to the "normal" patient population. In the latter population, the patient may be very willing and specific in offering details about their subjective complaints, symptoms, and so on. However, it is the desire of the elite athlete to compete—to participate in their respective sport—and they may not be as forthcoming. For example, situations may arise when attempting to take a history or elicit subjective complaints from an athlete when they may not be as willing to detail their history or complaint as a nonathletic patient. Hence, particular attention needs to be paid to the physical examination, screenings, prior medical records, or any other medical information that may raise a "red flag" in the mind of the health care professional. This care may in turn lead to making additional inquiries to understand the complete set of medical facts relied on in arriving at medical conclusions and using reasonable clinical judgment. Obviously, concerns of physician-patient confidentiality are of paramount importance; however, when necessary, careful consideration may need to be undertaken to obtain additional important factual information in consultation with appropriate professionals knowledgeable about confidentiality issues within their respective states.

Finally, providers should be aware of competing interests in situations surrounding eligibility/disqualification decisions. It is important to resist extrinsic pressure from the athlete, family members, coaching staff, administrators, alumni, and the public. All of these may impact the decision making medical process. In *Gathers v. Loyola-Larymount University*,¹¹ the sudden cardiac death of an elite college basketball player solely owing to an inflammatory cardiomyopathy was alleged to have been influenced

by a reduction in β -blocker dosage to nontherapeutic levels to allow him to compete without medication side effects. Although the case settled before judicial resolution, it illustrates that, in addition to appropriate disqualification (temporary and/or long term), one needs to be aware of competing interests and outside pressures that may influence proper medical judgment. Although often presented with this ethical dilemma, the role of the physician and associated sports medicine staff is to provide for the athlete's best medical interests and not succumb to any conflict with regard to performance expectations or competing interests. The legal responsibility for the return-to-play decision ultimately belongs to the licensed physician.¹²

LIMITING POTENTIAL EXPOSURES

There exists no road map that can guarantee professional health care providers will not find themselves involved in a professional claim brought by an athlete. However, there are certain considerations that may assist in limiting potential exposures. Key among these is careful, complete documentation. If there is one takeaway, it should be to document, document, document! Documentation should be performed consistently during all aspects of medical care, including histories, screenings, physical examinations (noting both the relevant positives and negatives), and the basis for any diagnosis and clinical recommendations including outside materials that may have been relied on or considered (eg, review of other medical records, consensus guidelines, published literature, including any consultations with others, such as other physicians, athletic trainers, players, or family when appropriate). When a claim is brought, clear documentation forming the basis for reasonable clinical judgment is the "bread and butter" in defending against such claims.

Obtaining a patient-athlete's informed consent when necessary under the circumstances should also be well-documented and is similar to the nonathlete population. All pertinent risks and benefits of procedures need to be discussed in detail and documented. Here again, however, there is a potential difference between the elite athlete and "normal patient." The "benefit" to the elite athlete is being able to compete in their respective sport at the highest level. They are going to want to hear what they want to hear. Hence, realistic goals need to be thoroughly discussed and well-documented.

Issues involving short-term and long-term restriction need to be well-documented. Of particular importance is careful documentation of any noncompliance with restriction recommendations. It should be documented that the patient-athlete understands the importance of the recommended restrictions and the medical risks potentially attendant to noncompliance.

PREPARTICIPATION PHYSICAL EXAMINATION

In 2014, The National Athletic Trainers' Association (NATA) published a position statement outlining prudent preparticipation physical examination standards and disqualifying conditions.¹³ Among other recommendations, the authors note that, "A comprehensive medical and family history should be obtained from each participant. This is the cornerstone of the PPE and should take into account the areas of greatest concern for sport participation: specifically, the American Heart Association recommendations for pre-participation cardiovascular screening of competitive athletes." Under the heading "Cardiovascular Screening" the authors note, "Specific questions regarding risk factors should be asked during the history portion of the PPE. A positive response to any question should be confirmed and further evaluation conducted if necessary." Of note, The AHA has also recently updated their position statement and expanded their recommendations from 12 to 14 elements in the preparticipation

history and physical.⁶ The current NCAA Sports Medicine Handbook⁹ does not address in detail the information contained in the NATA position statement, nor is there anything specific from the National Federation of State High School Associations¹⁰ on this subject.

It is important to remember that the entire standard screening examination (PPE) and any additional diagnostic assessment must be completed before signing the official medical clearance form. Additionally, when a suspicion of cardiovascular disease is raised, standard practice requires a specialty consultation.¹⁴ It is not appropriate to allow an athlete to compete (or even practice) if further cardiovascular assessment has been flagged as part of the standard PPE. This was illustrated by the case of *Izidor v. Knight*.¹⁵ During the PPE of a community college basketball player, abnormal findings of a heart murmur and 2 prior episodes of syncope lead to performing an echocardiogram with a subsequent diagnosis of hypertrophic cardiomyopathy (HCM). However, the sports authorization clearance form was signed before the echocardiogram and diagnosis of HCM had been completed. The athlete died 6 weeks later after playing basketball. The allegation of inadequate screening was settled, but the case underscores that adherence to screening guidelines and prudence would suggest that final medical clearance be withheld pending the results of all diagnostic evaluations.

The literature has offered differing opinions on including routine ECG (or even an echocardiogram) screening as part of the PPE. Although there are proponents of both, the legal standard by which a physician offering such services either voluntarily or at reduced cost must adhere to is not well-established.

Professional sports represent a unique paradigm in terms of cardiovascular screening compared with high school and collegiate athletes. Among those factors is the relatively small cohort (around 4000) in comparison with high schools and colleges, the fact that they are largely of adult age with complex labor contracts being compensated for their services, and that professional teams possess greater financial resources to support more comprehensive screening initiatives with noninvasive testing.¹⁶ As such, there is little to no judicial precedent related to screening and disqualification decisions in professional athletes with medicolegal guidelines generally directed toward high school and college participants.¹⁴

MEDICAL DISQUALIFICATION

At the collegiate level, the NCAA Sports Medicine Handbook⁹ states the following under Guideline 2A: "*Withholding a student-athlete from activity.* The team physician has the final responsibility to determine when a student-athlete is removed or withheld from participation owing to an injury, an illness or pregnancy. In addition, clearance for that individual to return to activity is solely the responsibility of the team physician or that physician's designated representative."

The sentinel case on this at the collegiate level is the United States Court of Appeals for the Seventh Circuit decision in *Knapp v. Northwestern University*.¹⁷ Knapp, while a student-athlete, suffered a sudden cardiac death during a pick-up basketball game during his senior year of high school and was successfully resuscitated by paramedics. Knapp subsequently had a defibrillator implanted. Northwestern University committed to honor his scholarship although the head team physician declared Knapp ineligible to participate. Knapp filed suit in federal district court asserting that the university's actions violated the Rehabilitation Act. Expert witnesses testified on both sides and the trial court found in favor of Knapp. The university appealed and the United States Court of Appeals reversed the decision, holding that the student was not "disabled" and not an "otherwise qualified individual" within the meaning of the

Rehabilitation Act. The Seventh Circuit language included, "Nicholas Knapp wants to play NCAA basketball for Northwestern University – so badly that he is willing to face an increased risk of death to do so.... In this case, the severity of the potential injury is as high as it could be – death."

The federal district court reasoned that, in the face of conflicting expert opinion and evidence regarding risk, and the fact that no scientific data existed to quantify that risk, the decision on whether Knapp should play falls in the lap of the court. The Seventh Circuit in reversing stated, "[w]e disagree with the district court's legal determination that such decisions are to be made by the courts and believe instead that medical determinations of this sort are best left to team doctors and universities as long as they are made with reason and rationality and with full regard to possible and reasonable accommodations. In cases such as ours, where Northwestern has examined both Knapp and his medical records, has considered his medical history and the relation between his prior sudden cardiac death and the possibility of future occurrences, has considered the severity of the potential injury, and has rationally and reasonably reviewed consensus medical opinions or recommendations in the pertinent field – regardless whether conflicting medical opinions exist – the university has the right to determine that an individual is not otherwise medically qualified to play without violating the Rehabilitation Act. The place of the court in such cases is to make sure that the decision-maker has reasonably considered and relied upon sufficient evidence specific to the individual and the potential injury, not to determine on its own which evidence it believes is more persuasive."

With regard to the consensus medical opinions, the court went on to reference the Bethesda Conferences: "Although the Bethesda Conferences were not convened by public health officials and such guidelines should not substitute for individualized assessment of an athlete's particular physical condition, the consensus recommendations of several physicians in a certain field do carry weight and support the Northwestern team doctors' individualized assessment of Knapp." The guidelines of the 26th Bethesda Conference [current at that time], which directly addressed this clinical situation, were offered by Northwestern's experts as substantiation, "For athletes with implantable defibrillators ... all moderate and high intensity sports are contraindicated."

The Seventh Circuit concluded, "[w]e do not believe that, in cases where medical experts disagree in their assessment of the extent of a real risk of serious harm or death, Congress intended that the courts – neutral arbiters but generally less skilled in medicine than the experts involved – should make the final medical decision. Instead, in the midst of conflicting expert testimony regarding the degree of serious risk of harm or death, the court's place is to ensure that the exclusion or disqualification of an individual was individualized, reasonably made, and based upon competent medical evidence. So long as these factors exist, it will be the rare case regarding participation in athletics where a court may substitute its judgment for that of the school's team physicians."

Similar to the Knapp case involving a collegiate athlete, in the case of *Larkin v. Archdiocese of Cincinnati*,¹⁸ a federal court held that a high school could exclude an athlete with HCM from its athletic football program without violating the Rehabilitation Act. Larkin claimed that the school's adherence to unanimous cardiologists' recommendations that playing posed an unacceptable risk of sudden death owing to heart disease violated the act. The federal court rejected Larkin's contention, reasoning that Larkin's inability to satisfy an Ohio High School Athletics Association bylaw requiring a "physician certification" before athletics participation was a "substantial justification" for the school's decision and that students do not have a compelling right to participate in extracurricular activities without medical clearance.

As stated previously, consideration for participation and disqualification of a professional athlete may in fact differ from those at the high school and collegiate level. This is illustrated in the 2013 case of *Mobley v. Madison Square Garden LP*.¹⁹ Mobley, a former National Basketball Association (NBA) basketball player who was previously diagnosed with HCM, had been cleared to play from 1999 to 2008 (subject to signing a liability waiver), but was subsequently medically disqualified by 2 cardiologists during the 2008 and 2009 season when the New York Knicks acquired him. Mobley claimed 3 other cardiologists examined him, and there had been no material change in his heart condition and was fit to play as in the prior seasons. A New York federal district court judge ruled that Mobley might have a valid state law disability discrimination claim against the New York Knicks.

This article is not intended to discuss the myriad of cases dealing with disqualification of competitive athletes, but rather to raise an awareness of pertinent issues. Additional excellent resources on this subject is the article "Medical and Legal Issues in the Cardiovascular Evaluation of Competitive Athletes", by Paterick and colleagues,¹⁴ and the numerous publications and articles authored by Matt Mitten,²⁰ Professor of Law, Director of the National Sports Law Institute, Marquette University Law School. Professor Mitten's papers can be accessed on the Social Science Research Network (SSRN) at <http://ssrn.com/author=586273>.

WAIVERS

Because of the desire of the elite athlete to compete under some particular set of medical conditions, the issue of "waivers" may arise. Such an issue needs to be examined in consultation with professionals knowledgeable on such issues within any particular state jurisdiction. As a generality, courts tend not to look favorably on waivers when presented in defense of a claim of professional negligence.

In both the *Knapp* and *Larkin* cases, the athlete was willing to sign a waiver of future claims after complete disclosure of the medical risks of sports competition. However, there is no good legal precedent that "forces" a school to accept signed waivers in these circumstances and the legal validity of such waivers (exculpatory agreements) are questionable.

A potential exception may be between an adult, professional athlete and a team physician. Courts may view this relationship differently than the typical physician-patient relationship and could potentially uphold liability waiver in certain circumstances.²⁰ This was illustrated previously in the case of *Mobley v. Madison Square Garden LP*, where courts may be willing to adopt "the athlete informed consent model for professional athletes, which would enable a professional athlete to choose to participate, despite medical disqualification by the team physician, if other competent medical authority clears him or her to play."²¹ However, this does not negate a physician's legal responsibility to follow good medical standards and conform to accepted, customary, or reasonable medical practice. This issue has not yet been completely resolved within the legal system.

THE SECOND OPINION

The second opinion is often part of the evaluation of an athlete and has important legal and ethical implications. This could be driven by an athlete to either confirm/refute a diagnosis and/or provide return-to-play decisions, or if they do not "like" the clinical recommendation and advice. Alternatively, a physician may recommend an athlete obtain a second opinion when they are uncomfortable with providing a diagnosis that could impact return-to-play decisions.

The assessment of and clinical decision making for athletes can be a complex issue. Understanding the sport specific cardiac adaptations that are at play in any given sport ("exercise-induced cardiac remodeling" and the "athlete's heart") and how that may overlap with certain structural and acquired heart conditions is paramount when assessing an athlete and making appropriate return-to-play decisions. We do not want to place an athlete at risk by returning them to training and competition with a potentially lethal cardiac condition, but we must also be mindful of inappropriately restricting an athlete. As such, a second opinion provided by another physician with expertise in understanding both the physiology of the "athlete's heart" as well as the pathologic substrates that create the proverbial "gray zone" may prove to be the prudent course of action.

The athlete may also drive the second opinion, often to empower themselves with a better understanding to allow them to make a more informed decision about their own medical care. With all that is at stake in making not only return-to-play decisions (scholarships, finances, professional career, etc), but also lifelong management of a potentially lethal disease, an athlete may in fact seek confirmation from a nationally recognized expert. Alternatively, an athlete may pursue a behavior more consistent with "doctor shopping," simply looking for someone (expert or not) willing to provide clearance for return-to-play.²² Care must be taken to avoid participating in "doctor shopping" behavior by an athlete that may place the athlete at harm and increase medical costs.

When providing a second opinion, it is important to assure to the athlete that a complete and nonerroneous evaluation, diagnosis, or medical recommendation has been made from another point of view. Ensuring the athlete has all of the information explained thoroughly so that they can make an autonomous decision about proceeding with their own health care is important. A second opinion should not be used as an alternative to not providing an honest and meaningful evaluation for the athlete.²³

A second opinion does not need to alter the clinical assessment from the primary health care provider. Just because a second opinion may disagree with the initial opinion, the first provider does not necessarily need to acquiesce to the second opinion and the initial provider is not bound by the second opinion. Rather, the second opinion presents an additional factor for consideration by the primary health care provider. The clinical judgment of the primary health care provider, considering all of the pertinent medical information, provides the basis for defending against claims of professional negligence if such judgment is consistent with accepted, reasonable medical practice. Reasonable medical decisions and clinical judgment may differ among medical practitioners yet fall within acceptable medical practice.

ENERGY DRINKS

The use of energy drinks in the youth population has been increasing rapidly. It is estimated that approximately 35% of teenagers (adolescents to college students) regularly consume energy drinks and that the "jock identity" was associated with increased consumption.²⁴ Pharmaceutical-grade caffeine as well as additional caffeine from natural sources can often be found in energy drinks with multiple caffeine sources tied to a higher rates of adverse effects.²⁵ Clinicians need to be aware of potential adverse cardiovascular effects from energy drinks, including tachycardia, hypertension, obesity, and other medical problems, particularly when assessing the symptomatic athlete.

SUMMARY

The legal and ethical issues in the cardiovascular care of elite athletes continue to expand, not only with questions of screening and disqualification, but also from public pressure. It is important to recognize that SCA/SCD in an elite athlete is rare, yet they are a tragic and devastating outcome to the family and community. Remember that when the suspicion of cardiovascular disease is raised, standard practice requires specialty consultation and temporary restriction from participation is warranted. Be cognizant of competing interests and outside pressures and be clear that as the medical provider your primary responsibility is to protect the health and well-being of the athlete.

Although there is no national standard of care in providing services to athletes, the medical provider needs to understand the legal standards at play and conform to what is generally accepted, customary, or reasonable medical practice. Knowledge and documentation of adherence to national guidelines, such as the AHA PPE, 14th edition, and the 36th Bethesda Guidelines, do provide some evidence of good medical practice, but are not conclusive evidence of the medical or legal standard of care.

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