

Sexual Health for Patients With an Implantable Cardioverter Defibrillator

Lauren D. Vazquez, Samuel F. Sears, Julie B. Shea and Paul M. Vazquez

Circulation. 2010;122:e465-e467

doi: 10.1161/CIRCULATIONAHA.110.949628

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231

Copyright © 2010 American Heart Association, Inc. All rights reserved.

Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the
World Wide Web at:

<http://circ.ahajournals.org/content/122/13/e465>

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in *Circulation* can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the [Permissions and Rights Question and Answer](#) document.

Reprints: Information about reprints can be found online at:
<http://www.lww.com/reprints>

Subscriptions: Information about subscribing to *Circulation* is online at:
<http://circ.ahajournals.org/subscriptions/>



Sexual Health for Patients With an Implantable Cardioverter Defibrillator

Lauren D. Vazquez, PhD; Samuel F. Sears, PhD;
Julie B. Shea, MS, RNCS, FHRS; Paul M. Vazquez, DO

Studies examining the quality of life of implantable cardioverter defibrillator (ICD) patients have consistently demonstrated that ICD patient quality of life is at least equal to, if not better than, that of patients treated with medications alone.¹ Quality of life may be related in part to the patient's ability to resume "pre-ICD" activities; however, sexual activity is rarely included as part of the patient education process. Sexual functioning has not been well studied in ICD patients, but preliminary research has suggested that patients commonly express concerns about fear of ICD shock during sex, varying interest and pattern of sexual activity, and a desire for more information and sexual counseling.² The purpose of this Cardiology Patient Page is to identify typical issues related to sexual functioning in ICD patients and offer possible strategies for effective management.

Barriers to Healthy Sexual Functioning in ICD Patients

Despite limited research regarding the social functioning of ICD patients, our

collective clinical experience suggests that common barriers exist when it comes to addressing their sexual health. The following sections detail specific barriers to healthy sexual functioning for ICD patients and proposed strategies for overcoming those barriers.

Communication Between Patients and Healthcare Providers

Although some people may believe that sex, love, and intimacy are subjects not to be discussed with others, sexual activity is highly relevant to your health and well-being and is an absolutely appropriate topic of discussion with your doctor. Unfortunately, research has shown a lack of adequate communication about sex between cardiovascular patients and their healthcare providers. Despite estimates that >75% of patients with cardiovascular disease experience some type of difficulty with sexual functioning,³ a lack of communication between patients and doctors persists.

Research has shown that 98% of patients reported that they believed their cardiologists should discuss sexual functioning with them; however, only 15% of patients have ever had such a discussion with their doctors.⁴ Although ICD patients clearly desire improved communication about sex, these discussions rarely occur.

Proposed Strategy

Develop an effective communication strategy with your doctor or healthcare professional regarding your sexual concerns, because this is a vital component of health and well-being. Spouses or intimate partners should also be involved in these conversations. Bring written questions or concerns to provide to your physician. Be proactive about this component of your health! The Table contains some frequently asked questions and answers that you may wish to discuss further with your doctor or healthcare professional.

Intimate Relationships

Your comfort with sexual activity or your desire for sex may have changed

The information contained in this *Circulation* Cardiology Patient Page is not a substitute for medical advice, and the American Heart Association recommends consultation with your doctor or healthcare professional.

From the Department of Psychiatry (L.D.V.), Ochsner Medical Center, New Orleans, La; Departments of Psychology and Cardiovascular Sciences (S.F.S.), East Carolina University, Greenville, NC; Cardiovascular Division (J.B.S.), Brigham and Women's Hospital, Boston, Mass; and Urology Private Practice (P.M.V.), Tampa Bay, Fla.

Correspondence to Samuel F. Sears, PhD, East Carolina University, 215 Rawl Hall, Greenville, NC 27858. E-mail searss@ecu.edu

(*Circulation*. 2010;122:e465-e467.)

© 2010 American Heart Association, Inc.

Circulation is available at <http://circ.ahajournals.org>

DOI: 10.1161/CIRCULATIONAHA.110.949628

Table. Frequently Asked Questions and Answers

Question	Answer
What will sexual activity do to my heart?	Sex is considered a moderate activity and represents only a moderate stress on the heart. The absolute cardiac risk during sexual activity is actually extremely low.
Is sex safe?	For most patients, sexual activity is a safe practice. Even if sexual intercourse is not possible for a particular patient, this should not discourage someone from engaging in intimate activities with his or her partner.
What if I get shocked during sex?	Receiving a shock during sex is no different from receiving a shock during any other activity. If you receive 1 shock and feel fine afterward, contact your doctor or clinic as soon as possible. If you receive more than 1 shock, call your doctor or 911 immediately. If you receive any number of shocks and do not feel fine afterward, call 911 (or the emergency number in your area) immediately.
Could I hurt my partner if I receive a shock during sex?	Your partner is not in any danger from your receiving a shock. This will not hurt your partner in any way or cause pain.
Are other patients concerned about sex too?	Many patients have fear regarding sexual activity. This is a significant concern for many ICD patients. In fact, many never return to sexual activity after implantation of their device because of this fear! Communicating with your doctor and feeling confident in the safety of your device is essential to getting back to living life to the fullest!

after implantation of an ICD. For many patients, a decrease or temporary stop in sexual activity is normal. Even if this occurs, it is important to continue to maintain a level of closeness and intimacy with your partner. As you consider returning to sexual activity with your partner, you may want to discuss what you are comfortable with at this time. If the idea of intercourse is too much for you to start with, other forms of intimacy may be a good start, such as holding hands, hugging, kissing, or finding your own ways of being close. A lack of sex will not damage a relationship, but a lack of intimacy and open discussion certainly could.

When you feel ready to move forward, you should set aside some special time for you and your partner, free from distractions. Taking things slowly at first may help. This can take time, patience, and effort from both of you. Although many may think exclusively of sex when discussing intimacy, there is actually more to intimacy than just intercourse. You and your partner may want to explore other activities to help you feel sexually satisfied. Intimacy is a continuing process, not just a single event.

Proposed Strategy

- Confirm your readiness for sexual activity with your doctor.
- Talk with your partner about activities that both of you feel comfortable engaging in ahead of time.
- Plan for sexual activity when you are likely to be more relaxed and have sufficient time to rest both before and after sex.
- Moderate your food intake and alcohol intake before sex. If you are a woman, it is particularly important for you to drink water both before and after engaging in sexual intercourse.
- Allow yourself to pace yourself back into sexual activity if necessary.

Fear of Shock During Sexual Activity

Fear of the cardiac risk associated with sexual activity is a common concern in ICD patients.² A large number of patients do not return to normal sexual activity after a cardiac event, possibly owing to fear of triggering additional cardiac problems.⁵ However, the physical demand of sexual intercourse has been described as being within the range of moderate physical activities and is often achieved or exceeded dur-

ing a normal workday.⁶ A study of 1774 patients who had experienced an acute myocardial infarction⁷ showed that sexual activity was a likely contributor in fewer than 1% of cases. In fact, regular physical exertion, such as that associated with sexual activity, was associated with a decreased risk of cardiac events in patients!

Similar to other cardiovascular patients, ICD patients often experience fear about the perceived strain of sexual activity on the heart and the subsequent potential for ICD shock. However, the absolute risk caused by sexual activity is considered to be extremely low, because sex for most patients represents only a moderate stress on the heart.

Proposed Strategy

Sex is a common concern, but most sexual activity is safe and is considered a gentle form of exercise. You and your doctors should explore issues related to fear of shock and establish a shock plan⁸ in the event that shock were to occur during sex. Feeling safe to return to sexual activity, having confidence in your device for protection, and decreasing any fear of shock during normal sexual activity can ensure a comfortable return to sexual activity.

Returning to Life After a Cardiac Event

Although you may be familiar with coping strategies to deal with difficulties, stress can still become too overwhelming to handle on your own. This can certainly be true after experiencing a cardiac event. Resuming sexual activity may represent yet another stress you may face; something that feels like “just one more thing” to deal with. Despite all of your efforts, there are times when stress like this cannot be handled by one person any longer.

Unfortunately, some patients who experience a cardiac event never return to sexual activity.⁵ Abstaining from sexual activity should not be a consequence of a cardiac event. There is no research to date that has suggested that ICD patients should not engage in sex.

Even if you feel you are not physically able to engage in sexual intercourse, you should not let this stop you from engaging in other intimate activities. Even the most stressful problems, such as resuming sexual or intimate activity, can be carefully worked through with the help of a professional. Achieving a satisfying and fulfilling sexual relationship can represent both a physical and psychological achievement for you and your partner.

Proposed Strategy

Keep in mind that there are times when you may need the support of a professional. It is important to be able to recognize the warning signs that may alert you that it's time to call for "backup." The following are general signs that you need to consult a professional for help with your concerns:

- Feeling sad or depressed on most days of the week
- Not enjoying activities that were once pleasurable, such as sex or intimacy, or having a lack of interest in things that used to be fun
- Avoiding activities, people, intimacy, or situations

- Thoughts of hurting or killing yourself, or feelings of hopelessness
- Feeling nervous, jittery, or tense, or being unable to get worries out of your mind.

Conclusions

Patient with ICDs may face unique challenges, including changes in sexual functioning or concerns about the safety of sexual activity. Communication with healthcare providers is essential in striving for optimal health and well-being. Improving communication with partners can promote healthy intimate relationships and ensure comfortable and satisfying sexual functioning. Resuming sexual activity may be a key component of returning to life after a cardiac event and taking control of the pursuit of optimal health.

Disclosures

Dr L.D. Vazquez has received speaker honoraria from Medtronic. Dr Sears serves as a consultant to Medtronic and has had or currently has research grants from Medtronic and St. Jude Medical and has received speaker honoraria from Medtronic, Boston Scientific, St. Jude Medical, and Biotronik. J.B. Shea serves as a consultant to Medtronic, Boston Scientific, St. Jude Medical, and Sanofi-Aventis and has received

speaker honoraria from Medtronic, Boston Scientific, and St. Jude Medical. Dr P.M. Vazquez has no conflicts of interest to disclose.

References

1. Sears SF, Matchett M, Conti JB. Effective management of ICD patient psychosocial issues and patient critical events. *J Cardiovasc Electrophysiol.* 2009;20:1297–1304.
2. Steinke EE, Gill-Hopple K, Valdez D, Wooster M. Sexual concerns and educational needs after an implantable cardioverter defibrillator. *Heart Lung.* 2005;34:299–308.
3. Kloner RA, Mullin SH, Shook T, Matthews R, Mayeda G, Burstein S, Peled H, Pollick C, Choudhary R, Rosen R, Padma-Nathan H. Erectile dysfunction in the cardiac patient: how common and should we treat? *J Urol.* 2003;170:S46–S50. Review.
4. Bedell SE, Duperval M, Goldberg R. Cardiologists' discussions about sexuality with patients with chronic coronary artery disease. *Am Heart J.* 2002;144:239–242.
5. Taylor HA Jr. Sexual activity and the cardiovascular patient: guidelines. *Am J Cardiol.* 1999;84:6N–0N.
6. Stein RA. Cardiovascular response to sexual activity. *Am J Cardiol.* 2000;86:27F–29F.
7. Muller JE, Mittleman MA, Maclure M, Sherwood JB, Tofler GH; Determinants of Myocardial Infarction Onset Study Investigators. Triggering myocardial infarction by sexual activity: low absolute risk and prevention by regular physical exertion. *JAMA.* 1996;275:1405–1409.
8. Sears SF, Shea JB, Conti JB. Cardiology patient page: how to respond to an implantable cardioverter-defibrillator shock. *Circulation.* 2005;111:e380–e382.