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Coping With Trauma and Stressful Events as a Patient With an Implantable Cardioverter-Defibrillator

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The lifesaving value and improved quality-of-life outcomes of the implantable cardioverter-defibrillator (ICD) are well established. However, for some patients, having an ICD implanted or receiving a therapy from the device can be considered stressful or traumatic. In fact, the experience and diagnosis of heart problems can be traumatic. Here, we review potential stressful or traumatic ICD patient experiences and provide an action plan for developing effective coping responses.

Is There a Difference Between a Stressful Event and a Traumatic Event?

Most people with ICDs have faced stressful and potentially traumatic events at some point in their life. Reactions to traumatic events range from brief, normal, and healthy to long-term, pathological, and debilitating. The difference between an event that is considered stressful and an event that is considered traumatic is primarily the personal reaction to the

event. If the reaction is one of fear, helplessness, or horror, it is typically considered traumatic by mental health specialists.

Posttraumatic stress disorder (PTSD) is a specific reaction to a traumatic experience. This reaction involves symptoms such as high anxiety, avoidance, and re-experiencing the event in the form of unwanted thoughts, dreams, or flashbacks. In the general public, approximately 8% of people meet the criteria for posttraumatic stress disorder,¹ whereas 20% of ICD patients have significant symptoms of PTSD, meaning that 1 in 5 people with an ICD has PTSD.² Although many more than 20% of ICD patients experience ICD-related “traumatic experiences,” not all develop trauma reactions such as PTSD. Risk factors for developing PTSD symptoms include lack of support from family or friends, a family or personal history of mental illness, a history of sexual or physical abuse as a child, or a cognitive or thought disorder.³ Ultimately, the distinction between a stressful event and a traumatic event has more to do

with a person’s reaction to the event than the event itself. See Figure 1 for the timeline of potentially stressful cardiac events.

What are Some Indicators of Poor Adjustment?

The way you react to an event can indicate how well you will adjust. After a traumatic event, some people experience dissociation such as feeling numb or dazed or have an out-of-body experience. People with these reactions tend to have a greater risk of developing PTSD symptoms.³ In addition, the way a person makes sense of (or interprets) the event is critical. Negative thoughts about the cardiac event, yourself and your heart condition, your ICD, or the world around you as the result of a stressful experience with your ICD can increase your risk of developing PTSD and indicate poor adjustment. Either of these reactions may indicate the need to seek additional support in coping and returning to life after the event.

Negative reactions to stressful events may result in anxiety,

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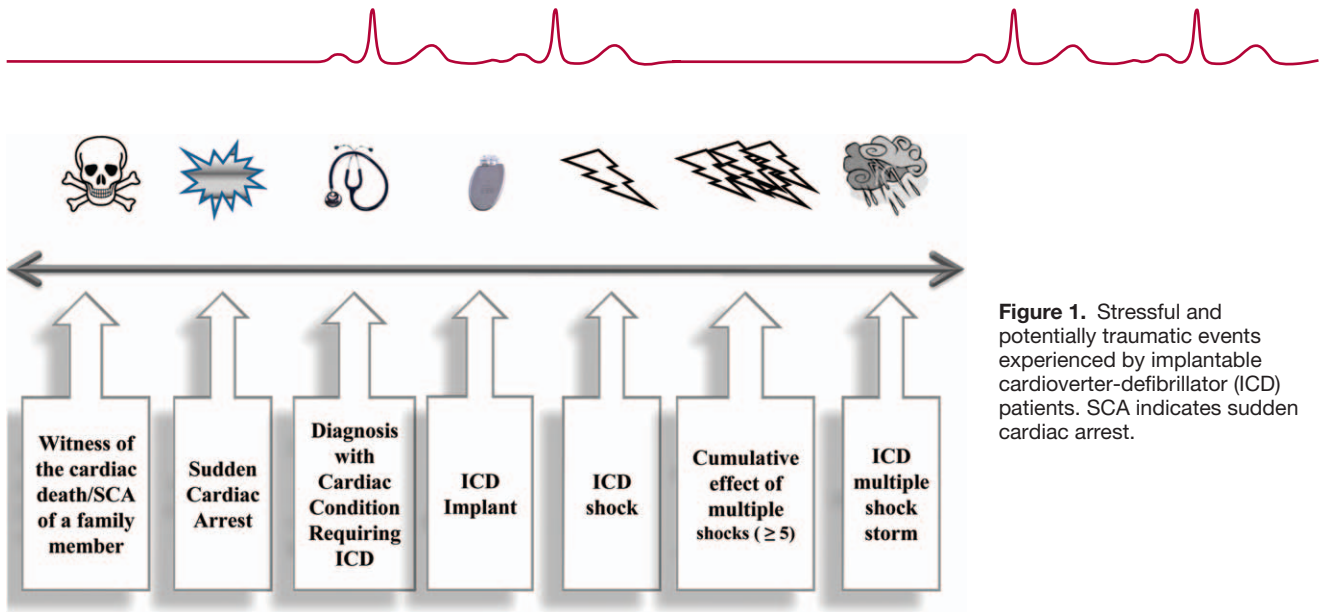


Figure 1. Stressful and potentially traumatic events experienced by implantable cardioverter-defibrillator (ICD) patients. SCA indicates sudden cardiac arrest.

depression, and unhealthy behaviors such as unusual or repetitive safety behaviors. Two of the commonest safety behaviors engaged in by ICD patients are checking (eg, your pulse or blood pressure) more frequently than your cardiologist or physician recommends and avoiding activities that may raise your heart rate because you fear that you will be shocked. It is important to follow your physician’s recommendations for safe and healthy activities. For most ICD patients, it is nearly impossible to cause a shock, meaning that most physical activity is safe.

How Can I Cope With Stressful Events?

Reactions to stressful events are very important in determining how a person will recover mentally and emotionally from a potentially traumatic event. In this section, some ways to develop healthy reactions to stressful events are covered.

Internal Reactions

Try to maintain a survivorship mentality for good coping. Your internal reaction, or the meaning you give the event, can make a difference in the way you feel. See Figure 2 for some examples

of how thinking affects your feelings and actions. Thinking like a survivor is not about being overly positive about what happens to you. It is more about being aware of your negative thoughts and the ways they can make you feel and act differently than you would like. Survivorship thinking reminds you of the value of coping and returning to full life.

External Reactions

It is very common for people who have experienced a difficult or traumatic event to try to avoid thoughts, feelings, things, people, and places to escape

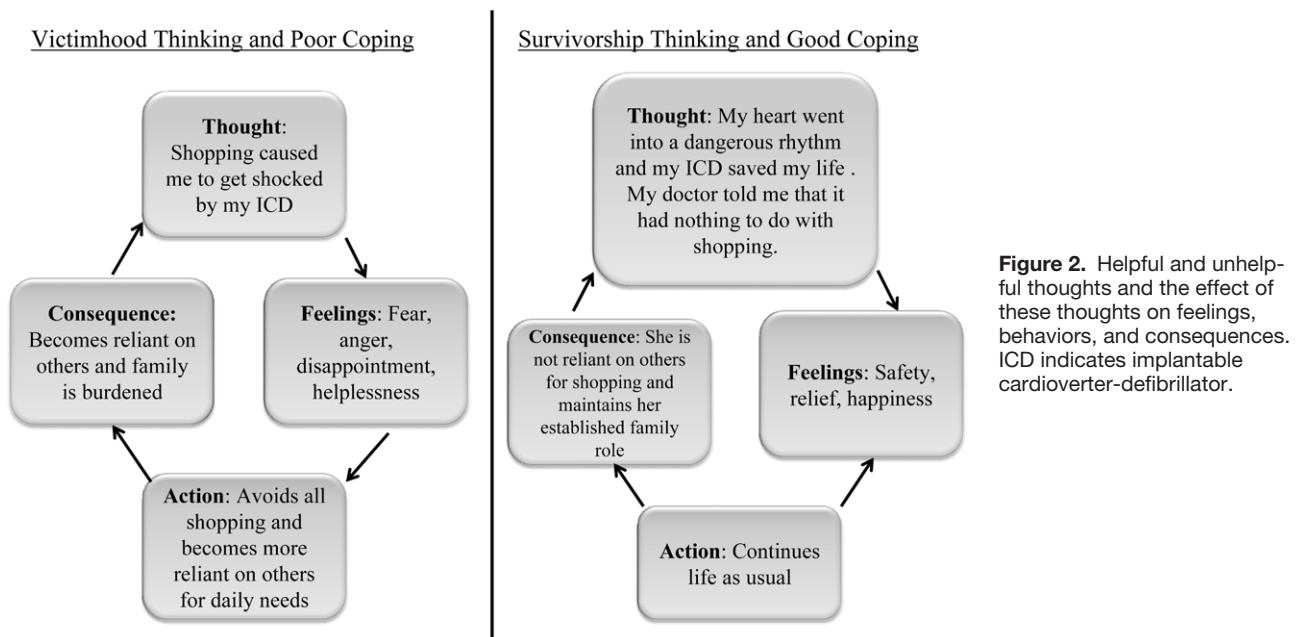


Figure 2. Helpful and unhelpful thoughts and the effect of these thoughts on feelings, behaviors, and consequences. ICD indicates implantable cardioverter-defibrillator.



What	How
<p>_____ Recognize stress</p>	Take inventory for: rapid heart rate, excess sweat, increased breathing rate, flushed face, muscle tension, clenched fists, irritability
<p>_____ Bring overall levels of stress/tension down</p>	Engage in some enjoyable quality of life activities: try relaxation, meditation, yoga, exercise, hot baths, reading a good book, volunteer
<p>_____ Involve your social network</p>	Educate family and friends, ask for help when you need it; try to be flexible about changes; support your spouse/caregiver: http://circ.ahajournals.org/content/120/10/e73.full ; spend quality time with spouse, friends, children, and grandchildren
<p>_____ Take care of your heart</p>	Educate yourself about your heart condition and ICD: http://circ.ahajournals.org/content/105/9/1022.full.pdf , keep up with appointments and medications, seek support for ICD patients on-line
<p>_____ Maintain a survivorship mentality</p>	Remind yourself of what you enjoy about life and gained from the ICD, write down reminders for “bad times,” pay attention to how you interpret events, listen for helpfulness and accuracy of thoughts
<p>_____ Take action</p>	Seek help when you need it (e.g., therapy, medication), plan in advance for stressful situations, know what to do in case of shock; http://circ.ahajournals.org/content/111/23/e380.full

Figure 3. A to-do list with different coping strategies that may be helpful for you when coping with stressful events and living with an implantable cardioverter-defibrillator (ICD).

difficult reminders. People with ICDs often fear certain activities because they think that they will get shocked or worry that their heart cannot take it. Unfortunately, avoidance can keep you from favorite activities and lower your quality of life. ICD patients can do most things safely. For example, mild to moderate exercise, travel, and sex are all considered safe for people with ICDs. Having a shock plan in place will provide you, your spouse, and your family guidance when and if you receive a shock (see <http://circ.ahajournals.org/content/111/23/e380.full>).⁴ Enlisting social support from friends and family can help motivate you to achieve your goals. Getting help with an activity can make people feel useful and helpful without being too difficult.

Helping Family and Friends Cope

Although you may be coping well with your ICD, it is important to remember that your family is also coping with change. Communicate with family members about their reactions to stressful events and your reactions. Keep your family and friends educated about your condition and device to remove some of the mystery and anxiety they may be feeling.

Families living with heart disease also experience changes in their usual roles. For example, a person who is used to taking care of the family and being the caregiver may become the patient. On the other hand, changes resulting from heart disease do not have to be negative. In fact, a high proportion of cardiac patients describe their family as “stronger” after heart illness.⁵ Allow yourself to be flexible with changes in family dynamics. Figure 3 has a list of coping strategies helpful for people with heart disease.

What If I Am Having Trouble Coping?

Sometimes, stress becomes too overwhelming to handle on your own. It is not uncommon for people who have ICDs to seek the help of a psychologist or other mental health professional to help manage their feelings. In ICD patients, PTSD is associated with worse physical and mental health outcomes.^{2,6} The effect your mental health can have on your physical health underscores the importance of making your mental health a priority. Remember that only a physician or mental health professional can diagnose you with a mental illness.

How Can I Find Professional Support?

Some psychologists and mental health professionals specialize in treating patients with heart disease. However, because few mental health practitioners focus solely on heart patients, ICD patients frequently establish good relationships with local general mental health providers. You can bring the 1-page “ICD Primer for Mental Health Professionals” (Figure 4) if you worry that a regular therapist may not understand what you are going through as an ICD patient. This primer provides information about the struggles that ICD patients may experience. The most effective treatments for PTSD are short (approximately 12 weeks) and involve working on your memory of the event and your beliefs about yourself, the ICD, and your heart condition. The treatment works by slowly exposing you to anxiety-provoking situations to reduce anxiety and avoidance. Seeking assistance may be daunting but is a good first step toward improving your quality of life.

Conclusions

Living with an ICD and heart condition can be stressful and requires healthy coping strategies during potentially



The Implantable Cardioverter Defibrillator: A Primer for the Mental Health Professional

You are reading this because you are interested in treating patients with Implantable Cardioverter Defibrillators (ICDs).

The primer will describe ICDs (including their use, indication, and function), the way that PTSD symptoms and other mental health conditions may manifest in ICD patients, and effective treatments for PTSD.



What is an ICD? The ICD is a medical device implanted in people at risk for sudden cardiac arrest. The device monitors the heart. If it detects a heart rhythm that could turn into sudden cardiac arrest it delivers a shock (like the paddles in an emergency room) directly to the person’s heart. This shock can painful and cause patients distress.

The device is implanted below the left collar bone and has wires that go to the heart. The battery lasts approximately five years. The device scar is visible and may result in body image issues.

<p>Depression: Prevalence: 10-41% with symptoms; ~ 20% meet clinical criteria •May develop learned helplessness as they have repeatedly been exposed to negative events. •May result in decreased attempts to manage illness and adhere to device and medication regimens</p>	<p>Anxiety: •Prevalence: 13 to 38% symptoms; ~ 20% meet clinical criteria •Fearing additional negative events may develop into more pathological anxiety. •May present in ICD patients as frequent and distressing worry about their cardiac condition, hypersensitivity to chest pain, fidgeting in clinic, or more common generalized anxiety symptoms •Small to moderate effect of shock on prevalence of anxiety in ICD patients.</p>	<p>Trauma Reactions (normative, acute stress, PTSD): •Prevalence of PTSD: ~ 20% •Potential traumas: diagnosis, SCA, shock, shock storm •May present with “phantom shocks,” where shock is not confirmed by the device ; hypervigilance of cardiac metrics such as blood pressure or heart rate; and avoidance of medications and doctor’s visits.</p>
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Empirically supported PTSD treatments, protocols, and trainings:

Cognitive behavioral therapy (CBT) is a more effective treatment for PTSD symptoms than pharmacologic treatment or even the combination of CBT and medication.

Some CBT’s for PTSD: Prolonged Exposure (PE), Cognitive Processing Therapy (CPT), Eye Movement Desensitization and Reprocessing Therapy (EMDR)

Free Training: CPT: http://cpt.musc.edu/ceu_statement; National Center for PTSD: <http://www.ptsd.va.gov/professional/index.asp>; Public domain treatment protocol: <http://www.psychologytools.org/>

Treatment Strategies
Reduce avoidance and promote safe re-engagement in feared activities
View hypervigilance as a red flag for treatment
Restructure cognitive distortions and promote acceptance of heart condition
Involve the family and spouse
Prepare for future run-ins with shock and cardiac dysfunction

Check out these other ICD patient pages:
 ICD information:
<http://circ.ahajournals.org/content/105/9/1022.full.pdf>
 Coping with Shock:
<http://circ.ahajournals.org/content/111/23/e380.full>
 Information for spouses:
<http://circ.ahajournals.org/content/120/10/e73.full>
 Sexual health:
<http://circ.ahajournals.org/content/122/13/e465.full>

Thank You for taking the opportunity to learn more about the psychosocial issues related to living with an ICD.

Figure 4. A guide for mental health professionals with information about implantable cardioverter-defibrillators (ICDs), common reactions to living with an ICD, symptoms of posttraumatic stress disorder (PTSD) in ICD patients, and effective treatments that may be adapted to persons with ICDs and PTSD.

traumatic situations. The traumatic events associated with living with an ICD may cause stress and symptoms of PTSD. Having a survivorship mentality, maintaining engagement in activities despite anxiety and fear, and including your friends and family in your recovery can promote good coping. However, if you continue to experience distressing symptoms such as avoidance, hypervigilance (always being on the lookout or jittery and easily startled), or re-experiencing (constantly thinking or dreaming about the events, having flashbacks), it may be helpful to contact a mental health professional. ICD patients have many options when seeking additional

support in their effort to achieve desirable quality of life.

Disclosures

Dr Sears has received speaker honoraria from Medtronic, Boston Scientific, and St. Jude. Dr Shea has received speaker honoraria and done consulting work with Medtronic, Janssen Pharmaceuticals, and Spectranetics. The other authors report no conflicts.

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