Hospices not deactivating defibrillators in patients

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Researchers from Mount Sinai School of Medicine have found that patients admitted to hospice care who have an implantable cardioverter defibrillator (ICD) are rarely having their ICDs deactivated and are receiving electrical shocks from these devices near the end of life. This first-of-its-kind study of hospice patients with ICDs is published in the March 2, 2010 issue of the *Annals of Internal Medicine*.

Mount Sinai researchers surveyed 900 hospices, 414 of which responded. Ninety-seven percent of the responding hospices admitted patients with ICDs. On average, nearly 60 percent of patients did not have the shocking function of the ICD deactivated. Only 20 percent of hospices had a question on their intake forms to identify patients with ICDs, and just 10 percent reported having a policy in place to discuss deactivation with patients and their families.

An ICD is a device programmed to detect cardiac arrhythmias and shock the heart back into normal rhythm. ICDs are effective in preventing sudden cardiac death in patients with recurrent arrhythmias, but for patients in hospice care they may cause unnecessary pain, and significant stress and anxiety for their family members who feel helpless in watching their loved one suffer.

"Hospices are the foremost experts at dealing with the complex communication issues surrounding end-of-life discussions with patients and their families," said Nathan Goldstein, MD, assistant professor, Hertzberg Palliative Care Institute, Brookdale Department of Geriatrics

and Palliative Medicine, Mount Sinai School of Medicine. "The fact that so few organizations have a policy about deactivation shows how complicated these conversations are. Having a policy in place can improve communication and provide better quality of care for patients and their families."

ICD shocks may cause physical and psychological distress for patients and their caregivers. Patients report that receiving shocks from an ICD is comparable to being "kicked or punched" in the chest. Receiving ICD shocks has been associated with the development of adjustment disorders, depression, post-traumatic stress disorder, and panic disorder. Family caregivers who observe patients being shocked report feelings of fear, worry, and helplessness, and have been shown to have increased rates of depression and anxiety. For patients with advanced disease, an ICD may no longer prolong a life of acceptable quality, and cause needless discomfort.

"These data indicate that developing a policy to address concerns surrounding ICDs can be highly beneficial in reducing emotional and physical discomfort for hospice patients and their families," said Dr. Goldstein, whose team developed a model policy for ICDs in hospices based on feedback they received from several facilities. The policy includes the necessity for staff to be educated on how ICDs work, identification of patients with ICDs at the time of evaluation and admission, an informed consent discussion with the patient and family about the benefits and burdens of the device, and how to handle the device in an emergency situation.

"Many patients have had these devices for years and see them as a sign of stability. It's important to address this issue and emphasize the importance of the patient's comfort at end of life," Dr Goldstein explained.

The researchers received a list of 3,750 hospices from the National Hospice and Palliative Care Organization. From this list, the researchers generated a geographically weighted random sample of 100 hospices from each of the nine U.S. census regions. Survey response rate was 50 percent.

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