

## Pacemakers and Aid in Dying: To disconnect or leave alone?

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Moderator, EOLUpdates

<lonnyshavelson@gmail.com>

Sep 10, 2020, 6:43:27 PM (5 days ago)

to Listserve of the American Clinicians Academy on Medical Aid in Dying

All,

One of the most common questions that come into the Academy is about how to deal with pacemakers on or before aid-in-dying days. There's no formally accepted answer to this, but the question is so common that I'm posting my own approach, and it would be interesting to hear the thoughts of others.

First: There's a big difference between a pacemaker and a combined pacemaker/defibrillator (ICD).

Pacemakers alone: In general, you can (and should) leave these in place and functioning. The last thing you want to have happen is to turn off the pacemaker and have the patient become bradycardic and dizzy or weak before or on the day they plan to take aid-in-dying medications. This is especially true if it's a continuous pacemaker rather than just in "demand" function.

But the question often comes up about whether the pacemaker will prolong the time-to-death after the medications are taken. Theoretically, that's possible, if the patient is dying from an aid-in-dying medication induced bradycardia without other toxic effects. But that pure a mechanism is quite rare. Most commonly, these patients have severely damaged myocardia from hypoxia and digitalis/amitriptyline toxicity--which prevents the pacemaker spike from capturing the myocardium and creating effective beats. What I most commonly see at the time of death of our monitored patients (i.e. all of the patients in my practice, for learning purposes) are pacer spikes without associated capture.

So for pacemakers alone: Do not disconnect or turn them off. And there's no need to worry about significantly prolonging the time to death.

For pacemaker/defibrillator (ICD) combinations: Since the digitalis/amitriptyline combination can cause tachyarrhythmias (and they often do), there's a significant chance that the ICD will go off and the patient's unconscious body will jump slightly from the discharge. This is esthetically unpleasing, but will not significantly delay the death. So I offer these patients and their families a choice: If the family won't be upset by seeing that slight jump (especially if there's a clinician there to reassure them), then it's safe to leave the ICD on. But if there's any question about upsetting the patient with the thought of the defibrillator's discharge, and/or if the family will be upset, it's not very difficult to call the company and have a technician sent out a few days before the death to turn off the ICD function (but not the pacemaker component).

In summary: For both pacemakers alone and pacemaker/ICD combinations, it's fine to do nothing and proceed with aid in dying as you otherwise would. But if you can turn off the ICD, that's often a good choice.

Thanks, all. I look forward to hearing from others about their own practices with pacemaker and/or ICD patients.

Lonny

Lonny Shavelson, MD  
Chair Pro-Tem  
[American Clinicians Academy on Medical Aid in Dying](#)

spybarnard  
<spybarnard@gmail.com>  
Sep 11, 2020, 4:44:55 AM (4 days ago)

to Listserve of the American Clinicians Academy on Medical Aid in Dying  
this is an interesting question.

re ICDs. my practice has always been to deactivate these as soon as someone becomes a DNR, has a comfort directed plan of care, or goes on hospice.... really at any time they are prioritizing quality of life over quantity. it seems a good measure to do whatever the plan is as we know that plans change. In the "good old days" we could all the ICD company rep directly to order it to be turned off at home or in AL, SNF facility. . in recent times, cardiologists seem to have tighter control and we have to go thru them. still, generally not a problem . its interesting to read you describe "a little jump" as people die. is it really that gentle? one could use an external magnet as well. I've been traumatized by witnessing firing as a person died before we could grab a magnet. maybe that was atypical?

The PACEMAKER question is BIG one for me. I've worked with several people now who had pacemakers put in for one purpose (when quality of life was good , interested in life prolongation) . as time passes, and quality declines, I have some (not all but a good number) patients want the pacemaker off as they really do not want anything prolonging life. I totally understand its not an issue with MAID as it will not interfere. But for those who might lose capacity, or are still open to other ways of dying, it can be an important thing. I am distressed by more and more cardiologists seeing a pacemaker as "permanent" and refusing to turn them off when a patient or a designated and legal health care agent asks for this. I have had to advocate strongly about the ethical framework for this (understanding that an individual person can decline, but the system should have a clear way to bypass this objection). I am curious what is happening in other areas.

Diana  
Vermont

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Timothy Quill  
<Timothy\_Quill@urmc.rochester.edu>  
Sep 11, 2020, 6:08:28 AM (4 days ago)

to Moderator, EOLUpdates, Listserve of the American Clinicians Academy on Medical Aid in Dying

My approach would clearly be to have the ICD function turned off in advance of the procedure. It is technically noninvasive to deactivate and will potentially prevent multiple shocks toward the very end of the process and may allow for a "sudden death" before MAID is conducted. I would suggest not deactivating the pacemaker function in advance (or if it is just a pacemaker, leave it alone), as this can lead to falls (if the patient is still walking) or fluctuations in consciousness (if intermittently bradycardic) or have no effect if it is not being activated very often. In non MAID states like NY, where a patient is looking at all options potentially including VSD, testing to see what the pacemaker is doing may be worth considering as if they are totally dependent on the pacemaker it might provide another option for them.

Tim

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mdschaulis

<mdschaulis@gmail.com>

Sep 11, 2020, 6:21:56 AM (4 days ago)

to Listserv of the American Clinicians Academy on Medical Aid in Dying

I would consider AICD shock at EOL to be very undesirable. It's been described as a horse kick to chest to me and certainly looks unpleasant when I've seen it, much more than a twitch.

It's easy to deactivate them with a magnet - perhaps that should be part of our toolkit.

Here's a video that shows how you can do it in one minute. <https://youtu.be/1E4oet5-toA>

That seems much better than watching it happen repeatedly.

Thanks for this topic,  
Monique Schaulis MD

Here is a short piece about family witnessing ICD

shock: [https://www.nursingcenter.com/journalarticle?Article\\_ID=4676802&Journal\\_ID=54016&Issue\\_ID=4676797](https://www.nursingcenter.com/journalarticle?Article_ID=4676802&Journal_ID=54016&Issue_ID=4676797)

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to Listserv of the American Clinicians Academy on Medical Aid in Dying

On September 12, 2020 4:23 PM Gary Johanson <[g.joh...@att.net](mailto:g.joh...@att.net)> wrote:

Hi Lonny,

Thanks for drawing attention to the AICD dilemma at EOL.

We take this issue quite seriously at Providence St Joseph Hospices.

My experience and the literature notes at times significant distress on the part of observers at time of death; depends on the AICD settings and perhaps other elements of body habits.

IN any event this phenomenon led to the American Academy of Hospice and Palliative Medicine to actually choose deactivation of AICD's as one of the 5 most important tenets of the care they deliver in the Choosing Wisely "5 Things" initiative of the ABIM.

Currently in times of COVID, Medtronic and other companies are reluctant to go into the homes to deactivate so we have a number of magnets enabling us to deploy these as needed into the home setting.

Once out of COVID, technicians are willing to go out to deactivate AICD's without an MD present, unlike the rare circumstance where patient is requesting deactivation of the pacer (I have been involved in 3 of these in the last few years—they are all very unique stories) in which case the MD needs to be in the home to push the deactivate button.

Let me know if any further dialogue on this might be useful.

Gary Johanson, MD

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**Providence St. Joseph Health**  
**St. Joseph Health Medical Group**  
**439 College Ave.**  
**Santa Rosa, CA 95401**  
**T: (707) 568-1094 C: (707) 396-4763**  
**F: (707) 568-0265**  
**E: [gary.j...@stjoe.org](mailto:gary.j...@stjoe.org)**  
**[www.stjosephhealthmedicalgroup.com](http://www.stjosephhealthmedicalgroup.com)**

Reply from Lonny: The obvious difference, of course, between general hospice patients and aid-in-dying patients, is that the aid-in-dying patients are guaranteed to be unconscious by the time they have a medication-induced arrhythmia that might trigger the ICD. The patients, therefore, have nothing to fear about it going off; the family, though, has to witness the "kick."

gary.johanson  
<Gary.Johanson@stjoe.org>  
unread,  
9:51 AM (1 hour ago)

to ACAMAID@googlegroups.com

For those running into pushback from cardiology on AICD deactivation in EOL scenarios, this consensus panel involving ACC, AGS, AAHPM and others is an ideal document to assist in advocating for deactivation when appropriate

Gary

**Gary Johanson, MD**  
**PALLIATIVE CARE SERVICES**

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T: [\(707\) 568-1094](tel:(707)568-1094) C: [\(707\) 396-4763](tel:(707)396-4763)  
F: [\(707\) 568-0265](tel:(707)568-0265)  
E: [gary.j...@stjoe.org](mailto:gary.j...@stjoe.org)  
[www.stjosephhealthmedicalgroup.com](http://www.stjosephhealthmedicalgroup.com)

to Listserve of the American Clinicians Academy on Medical Aid in Dying  
From: Lonny Shavelson, MD 9/14/20

Thank you all (a prestigious group of respondents) for adding to the discussion about pacemaker/ICDs in medical aid in dying.

I believe there's a consensus here, so if I may summarize for those on the Listserve:

Pacemakers can and should be left on before medical aid in dying.

ICDs, whenever possible, should be turned off -- either by the company or by a circular magnet that can be used by any clinician.

If it is impossible to turn off the ICD, it will not impede the efficacy of aid-in-dying medications nor the patient's experience of death. But the family may be disturbed by the firing of the ICD.

Thank you!!

Lonny

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