Letter by Lewis et al Regarding Article, “REPLACE DARE (Death After Replacement Evaluation) Score: Determinants of All-Cause Mortality After Implantable Device Replacement or Upgrade From the REPLACE Registry”

Research investigating the suitability of cardiac implantable electric device (CIED) replacement is gaining momentum. Chung et al developed the REPLACE Death After Replacement Evaluation (DARE) score to identify patients with limited expected longevity after CIED replacement. We congratulate the authors for their important contribution for informing CIED replacement decision making. Consideration of harms of CIED replacement is equally as important as benefits for these types of medical decisions.

However, we disagree with the authors’ conclusions stating that reassessment of CIED replacement would seem appropriate in patients with high scores. We argue that generator replacement should be reassessed in all implantable cardioverter-defibrillator (ICD) replacement patients regardless of their expected longevity. We agree with Chung et al. that comorbidity and competing mortality risks are important, but they should not be the only factors informing CIED generator replacement decisions.2

Patients’ expectations and personal experiences of living with an ICD shape their preferences for continued ICD therapy. Hence, their expectations and preferences for ICD therapy should also inform the decision for or against replacement. This approach is consistent with evidence-based decision making. In our recent survey of patients who underwent ICD pulse generator replacement,3 55 of 106 (51.9%) respondents were unaware that ICD replacement was not mandatory. Of those who were unaware, 15 (27.2%) said that given the option they would have considered not replacing their ICD. There were no baseline predictors of likelihood to decline replacement, but a non-statistical trend was noted toward younger patients (61.1 versus 68.0 years; P=0.06) being more likely to consider declining. Our survey also found that many patients grossly overestimated the benefits of ICD therapy and underestimated the risks of ICD generator change.3 Ensuring that patients have an accurate understanding of the risks and benefits of their ICDs is necessary for informed consent. But ensuring that decisions also reflect patients’ informed preferences is essential for achieving high-quality health decisions.4

Although the REPLACE DARE risk score advances our understanding, caution is advised, as the simple application of a risk score may further perpetuate a paternalistic rather than a patient-centered decision-making process. Given the preference-sensitive nature of ICD therapy, the importance of engaging all patients approaching ICD replacement in shared decision making cannot be overstressed. Shared decision making for these types of preference-sensitive decisions can be facilitated using patient decision aids, which have been shown to increase knowledge, patient engagement, and improve patients’ realistic perceptions of their treatment choices.5 To better support all patients, regardless of their clinical presentation, to participate in this increasingly common decision, our group is currently developing a decision aid focused on ICD pulse generator replacement (Decision Aid Library Inventory, 2014, https://decision-aid.ohri.ca/cochinvent.php).

In summary, the evidence about risks and harms arising from the study of Chung et al. is important to inform decision making with all patients. Using a shared decision making approach requires a discussion that includes both the benefits and harms of ICD pulse generator replacement. In this way, patients will have an opportunity to share their informed preferences to ultimately achieve a quality decision.

Disclosures

None.

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