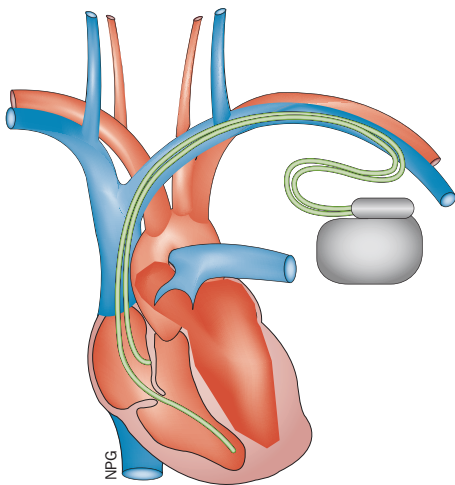


DEVICE THERAPY

Defibrillation testing unnecessary during routine cardioverter–defibrillator implantation

Defibrillation testing of implantable cardioverter–defibrillators (ICDs) does not improve outcomes compared with device implantation without testing and, therefore, “defibrillation testing during first time ICD implantation should no longer be recommended for routine



left-sided ICD implantation,” advise the investigators of the NORDIC ICD trial.

Defibrillation testing involves induction of ventricular fibrillation to check whether a newly positioned ICD correctly detects and terminates it. However, modification of the system if the first test fails has not been shown to improve survival. Moreover, testing can lengthen the procedure time by ~30 min, increase fluoroscopy exposure by ~40%, and confer a risk of adverse events. Accordingly, investigators designed the NORDIC ICD trial to test whether omitting defibrillation testing was noninferior to routine testing.

A total of 1,077 patients were randomly allocated to receive an ICD with or without defibrillation testing. During follow-up (median 22.8 months), 8.6% of patients with defibrillation testing had an arrhythmic episode with at least one appropriate shock, compared with 8.8% of patients without defibrillation testing. The average first-shock efficacy for all

true episodes of ventricular tachycardia or fibrillation (the primary end point) was 96.7% in patients with defibrillation testing and 100% in patients without defibrillation testing, meeting the prespecified threshold for noninferiority. No significant differences were observed between the groups in procedure-related serious adverse events or mortality.

Dietmar Bänsch, lead author on the trial report, concludes that “during routine implantations, ICDs should not be tested any more. This makes implantations easier and more similar to pacemaker implantations. Complications during implantations will decrease, and less technical support is necessary.”

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Original article Bänsch, D. *et al.* Intra-operative defibrillation testing and clinical shock efficacy in patients with implantable cardioverter-defibrillators: the NORDIC ICD randomized clinical trial. *Eur. Heart J.* doi:10.1093/eurheartj/ehv292