document was written after publication of the VEST trial,[2] which is the only randomized controlled trials (RCT) on WCD, and the VEST trial was published after the current sudden cardiac death (SCD) guidelines.[3] The VEST trial was a well-powered RCT investigating the benefit of WCD in post-MI patients with the primary endpoint arrhythmic death. The patients in the trial had ejection fraction below 35% and were randomized in a 2:1 ratio to WCD or standard care. Arrhythmic death occurred in 1.6% of patients in the WCD group and in 2.4% of the control patients (relative risk 0.67 with no statistical difference between the groups). Death from any cause was a secondary outcome and demonstrated a benefit in the WCD treated patients (relative risk 0.64, $P = 0.04$). These data were discussed thoroughly in the writing group of the consensus document group and we felt that the current scientific evidence does not merit a general recommendation of WCD in post-acute myocardial infarction (AMI) patients.

There were two major trials which aimed at verifying the hypothesis whether an early implantable cardioverter-defibrillator (ICD) implantation following AMI may be superior to the present standard of care. Specifically, in the DINAMIT trial,[4] patients were enrolled 6–40 days, and in the IRIS trial,[5] 5–31 days after MI. Both trials showed no benefit of an early ICD implantation vs. no ICD (standard of care) with respect to overall mortality. Consequently, ICD implantation for the primary prevention of sudden cardiac death is not indicated <40 days after AMI.[3]

We certainly agree with David Duncker and Christian Veltmann that there is a need to identify the post-MI patients at risk of SCD before ICD implantation, who would benefit from a WCD before a potential ICD should be implanted and encourage the scientific field to plan an RCT to lower the burden of SCD.[6] Based on the VEST trial, currently, we do not recommend WCD in post-MI patients with ejections fraction below 35%.

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The wearable cardioverter-defibrillator in acute coronary syndromes, a distinctive point of view

In the consensus document on cardiac arrhythmias in the emergency settings of acute coronary syndrome and revascularization[1], the authors statethat there is no indication at all for the use of the wearable cardioverter-defibrillator (WCD) in acute coronary syndromes. The WCD is as not indicated and flagged 'red'.

This mainly derives from data of the IRIS[2] and DINAMIT[3] trial and finally by the lately publication of the VEST trial.[4] The first two studies as mentioned are not conducted with the WCD but implantable cardioverter-defibrillator's and the limitations have been stated in the article and should not been over estimated in this setting. The VEST trial, although failing in reducing sudden cardiac death rates in the whole study cohort still was effective in the as-treated analysis (WCD has to be worn to be effective). These results perfectly reflect the data of the LifeVest registry and the daily clinical practice.[5] There definitely are remaining indications for the WCD in the setting on acute coronary syndromes, LVEF is not the only relevant parameter that should be taken into account. Incomplete revascularization, Left ventricular ejection fraction (LVEF), New York Heart Association (NYHA) class, scar burden, concomitant medications, and atrial fibrillation are some additional risk factors.

Although the Vest trial is a prospective randomized trial, it bears several limitations and biases it should be seen in context with the non-randomized data and the on-treatment analysis. A general statement concerning the WCD as not indicated in the early phase (up to 40 days) as in this consensus document is not our opinion. We suggest and perform an individualized approach, including the willingness of the patient to wear the WCD.

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