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# Experience with the wearable cardioverter-defibrillator by disease etiology: results from the wearit-II registry

V. Kutyifa, K. Vermilye, W. Zareba, S. McNitt, I. Goldenberg

*University of Rochester Medical Center, Cardiology Division, Rochester, United States of America*
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**Background:** The use of the wearable cardioverter-defibrillator (WCD) in patients with non-ischemic cardiomyopathy has been less characterized.
**Objective:** We aimed to characterize WCD use and outcomes for patients with ischemic or non-ischemic cardiomyopathy, enrolled in the WEARIT-II Registry.
**Methods:** In WEARIT-II, we stratified 1,732 patients into ischemic (n=805) and non-ischemic etiology (n=927). WCD wear time, arrhythmia events during WCD use, and implantable cardioverter-defibrillator (ICD) implantation rates, or ejection fraction (EF) improvement at the end of WCD were evaluated for etiology subgroups.
**Results:** The WCD median wear time was higher in patients with non-ischemic cardiomyopathy (93 vs. 87 days, p=0.003), however daily use was similar (22.4 vs. 22.6 hours, p=0.07). There were 24 ischemic patients (3%) with sustained VT/VF events compared to 10 patients (1%) with non-ischemic cardiomyopathy (p=0.013). About 2/3 of these events were treated with WCD shock in ischemic patients, half of them in the non-ischemic group (1.9% vs. 0.4%). Atrial arrhythmias were frequent in both groups (3.1% vs. 3.1%, p=0.06). At the end of WCD use, 36% of the non-ischemic patients were implanted with an ICD compared to 42% in ischemic (p=0.01), likely due to the lower rate of sustained ventricular arrhythmias (Figure).
**Conclusions:** In WEARIT-II, patients with non-ischemic cardiomyopathy had longer WCD use than ischemic patients with good compliance. The rate of sustained ventricular arrhythmia events was lower in non-ischemic patients avoiding the need for an ICD implantation in more patients compared to ischemic, following a time period of risk stratification.

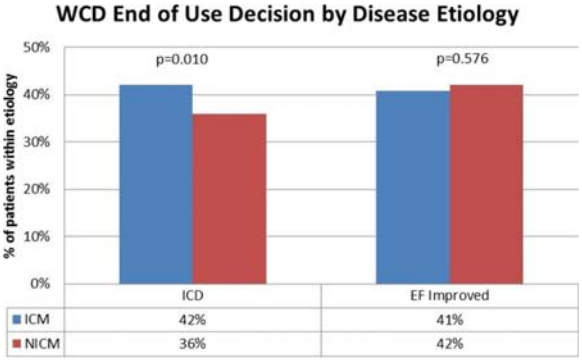


Figure 1