

**BACKGROUND:** Patients who survive life-threatening ventricular arrhythmias are at risk for recurrent arrhythmias. They can be treated with either an implantable cardioverter-defibrillator or antiarrhythmic drugs, but the relative efficacy of these two treatment strategies is unknown.

**METHODS:** To address this issue, we conducted a randomized comparison of these two treatment strategies in patients who had been resuscitated from near-fatal ventricular fibrillation or who had undergone cardioversion from sustained ventricular tachycardia. Patients with ventricular tachycardia also had either syncope or other serious cardiac symptoms, along with a left ventricular ejection fraction of 0.40 or less. One group of patients was treated with implantation of a cardioverter-defibrillator; the other received class III antiarrhythmic drugs, primarily amiodarone at empirically determined doses. Fifty-six clinical centers screened all patients who presented with ventricular tachycardia or ventricular fibrillation during a period of nearly four years. Of 1016 patients (45 percent of whom had ventricular fibrillation, and 55 percent ventricular tachycardia), 507 were randomly assigned to treatment with implantable cardioverter-defibrillators and 509 to antiarrhythmic-drug therapy. The primary end point was overall mortality.

**RESULTS:** Follow-up was complete for 1013 patients (99.7 percent). Overall survival was greater with the implantable defibrillator, with unadjusted estimates of 89.3 percent, as compared with 82.3 percent in the antiarrhythmic-drug group at one year, 81.6 percent versus 74.7 percent at two years, and 75.4 percent versus 64.1 percent at three years (P<0.02). The corresponding reductions in mortality (with 95 percent confidence limits) with the implantable defibrillator were 39+/-20 percent, 27+/-21 percent, and 31+/-21 percent.

**CONCLUSIONS:** Among survivors of ventricular fibrillation or sustained ventricular tachycardia causing severe symptoms, the implantable cardioverter-defibrillator is superior to antiarrhythmic drugs for increasing overall survival.