VENTRICULAR ARRHYTHMIA AND SUDDEN CARDIAC DEATH RELATED LEFT VENTRICULAR DYSFUNCTION DUE TO PRIOR MYOCARDIAL INFARCTION

ACC/AHA/ESC 2006 Guidelines for Management of Patients With Ventricular Arrhythmias and the Prevention of Sudden Cardiac Death

Recommendations

Class I

1. Aggressive attempts should be made to treat HF that may be present in some patients with LV dysfunction due to prior MI and ventricular tachyarrhythmias. *(Level of Evidence: C)*

2. Aggressive attempts should be made to treat myocardial ischemia that may be present in some patients with ventricular tachyarrhythmias. *(Level of Evidence: C)*

3. Coronary revascularization is indicated to reduce the risk of SCD in patients with VF when direct, clear evidence of acute myocardial ischemia is documented to immediately precede the onset of VF. *(Level of Evidence: B)*

4. If coronary revascularization cannot be carried out and there is evidence of prior MI and significant LV dysfunction, the primary therapy of patients resuscitated from VF should be the ICD in patients who are receiving chronic optimal medical therapy and those who have reasonable expectation of survival with a good functional status for more than 1 y. *(Level of Evidence: A)*

5. ICD therapy is recommended for primary prevention to reduce total mortality by a reduction in SCD in patients with LV dysfunction due to prior MI who are at least 40 d post-MI, have an LVEF less than or equal to 30% to 40%, are NYHA functional class II or III, are receiving chronic optimal medical therapy, and who have reasonable expectation of survival with a good functional status for more than 1 y. *(Level of Evidence: A)*

6. The **ICD** is effective therapy to reduce mortality by a reduction in SCD in patients with LV dysfunction due to prior MI who present with hemodynamically unstable sustained VT, are receiving chronic optimal medical therapy, and who have reasonable expectation of survival with a good functional status for more than 1 y. (Level of Evidence: A)

Class IIa

1. Implantation of an **ICD** is reasonable in patients with LV dysfunction due to prior MI who are at least 40 d post-MI, have an LVEF of less than or equal to 30% to 35%, are NYHA functional class I on chronic optimal medical therapy, and who have reasonable expectation of survival with a good functional status for more than 1 y. *(Level of Evidence: B)*

2. Amiodarone, often in combination with beta blockers, can be useful for patients with LV dysfunction due to prior MI and symptoms due to VT unresponsive to beta-adrenergic– blocking agents. *(Level of Evidence: B)*

3. Sotalol is reasonable therapy to reduce symptoms resulting from VT for patients with LV dysfunction due to prior MI unresponsive to beta-blocking agents. *(Level of Evidence: C)*

4. Adjunctive therapies to the ICD, including catheter ablation or surgical resection, and pharmacological therapy with agents such as amiodarone or sotalol are reasonable to improve symptoms due to frequent episodes of sustained VT or VF in patients with LV dysfunction due to prior MI. *(Level of Evidence: C)*

5. Amiodarone is reasonable therapy to reduce symptoms due to recurrent hemodynamically stable VT for patients with LV dysfunction due to prior MI who cannot or refuse to have an ICD implanted. *(Level of Evidence: C)*

6. Implantation is reasonable for treatment of recurrent ventricular tachycardia in patients post-MI with normal or near normal ventricular function who are receiving chronic optimal medical therapy and who have reasonable expectation of survival with a good functional
status for more than 1 y. *(Level of Evidence: C)*

Class IIb

1. Curative catheter ablation or amiodarone may be considered in lieu of ICD therapy to improve symptoms in patients with LV dysfunction due to prior MI and recurrent hemodynamically stable VT whose LVEF is greater than 40%. *(Level of Evidence: B)*

2. Amiodarone may be reasonable therapy for patients with LV dysfunction due to prior MI with an ICD indication, as defined above, in patients who cannot or refuse to have an ICD implanted. *(Level of Evidence:C)*

Class III

1. Prophylactic antiarrhythmic drug therapy is not indicated to reduce mortality in patients with asymptomatic nonsustained ventricular arrhythmias. *(Level of Evidence: B)*

2. Class IC antiarrhythmic drugs in patients with a past history of MI should not be used. *(Level of Evidence: A)*

	I	**IIA**	**IIB**	**III**
Prevenzione primaria	**ICD** therapy is recommended for primary prevention to reduce total mortality by a reduction in SCD in patients with LV dysfunction due to prior MI who are at least 40 d post-MI, have an <u>LVEF less than or equal to 30% to 40%, are</u> NYHA *functional class II or III,* are receiving chronic optimal medical therapy, and who have reasonable expectation of survival with a good functional status for more than 1 y. *(Level of Evidence: A)*	Implantation of an **ICD** is reasonable in patients with LV dysfunction due to prior MI who are at least 40 d post-MI, have an <u>LVEF of less than or equal to 30% to 35%, are NYHA</u> *functional class I* on chronic optimal medical therapy, and who have reasonable expectation of survival with a good functional status for more than 1 y. *(Level of Evidence: B)*	**Amiodarone** may be reasonable therapy for patients with *LV dysfunction* due to prior MI with an ICD indication, as defined above, in patients **who cannotor refuse to have an ICD implanted.** *(Level of Evidence:C)*	
Prevenzione secondaria	The **ICD** is effective therapy to reduce mortality by a reduction in SCD in patients with *LV dysfunction* due to prior MI who present **with hemodynamically unstable sustained VT,** are receiving chronic optimal medical therapy, and who have reasonable expectation of survival with a good functional status for more than 1 y.	Implantation is reasonable for treatment of **recurrent ventricular tachycardia** in patients post-MI with *normal or near normal ventricular function* who are receiving chronic optimal medical therapy and who have reasonable expectation of survival with a good functional status for more than 1 y. *(Level of Evidence: C)*		**1**. Prophylactic antiarrhythmic drug therapy is not indicated to reduce mortality in patients **with asymptomatic nonsustained ventricular arrhythmias.** *(Level of Evidence: B)* **2**. Class IC antiarrhythmic drugs in patients with a past history of MI should not be used. *(Level of Evidence: A)*