

Madigan Army Medical Center Referral Guidelines

Ventricular Arrhythmia

Diagnosis/Definition

- Ventricular ectopic beats which may or may not be associated with chest discomfort, dyspnea, or syncope; due to isolated, non-sustained, or sustained ventricular ectopy. The prognosis is based on underlying heart disease and hemodynamic consequences of the arrhythmia.
- Only a minority of patients with "palpitations" have ventricular arrhythmias. For a general approach to palpitations, see separate referral guideline.

Initial Diagnosis and Management

- H&P evaluating hemodynamic consequences of arrhythmia and underlying cardiac function: dizziness, syncope, angina, CHF, medications (cardiac and non-cardiac) causing proarrhythmia.
- 12 lead ECG.
- Electrolytes, drug levels, TSH.
- Evaluate for ischemia, structural heart disease and LV function (Echo., GXT, or Nuclear Stress Test, as appropriate). These may be done in primary care setting.
- Document rhythm during symptoms: 24 hour Holter monitor. Event recorder preferred for infrequent symptoms (arranged through cardiology).

Ongoing Management and Objectives

- Nonsustained ventricular ectopy and structurally normal hearts: treatment to reduce troubling symptoms only. Decrease caffeine/stimulants. Beta blocker therapy.
- Post MI nonsustained ventricular ectopy: Beta blockade. No empiric antiarrhythmics - may do more harm than good. Patients with significant LV dysfunction may benefit from EPS guided therapy.
- Unexplained syncope: determine LV function, obtain Holter or event monitor recordings. Advise against driving or activities where syncope would be harmful. Hospitalize initially if syncope is unexplained by vagal or volume causes or patient has LV dysfunction.
- Sustained wide complex tachycardia: hospitalize.
- With initial medical management, expect significant reduction in symptoms.
- Risk factor modification and optimal treatment of CHF are very important aspects of management.

Indications for Specialty Care Referral

- Survivor of sudden cardiac death.
- Documented sustained wide complex tachycardia.
- Unexplained syncope. In patients at risk for sudden cardiac death (Ejection Fraction < 35%).
- Disabling ventricular ectopy not responsive to initial therapy.
- Nonsustained ventricular tachycardia with symptoms or in patients with significant structural heart disease.

- Ischemic and non-ischemic cardiomyopathies with EF < 35% being considered for prophylactic ICD implantation.

Criteria for Return to Primary Care

- Patients on stable antiarrhythmic regimens with control of their arrhythmias.
- Patients with syncope after their evaluation is complete.
- ICD patients with otherwise stable cardiac status (except for ICD follow up, currently not available at MAMC).

Last Review for this Guideline: **January 2010**

Referral Guidelines require review every three years.

Maintained by the Madigan Army Medical Center - Quality Services Division
Clinical Practice and Referral Guidelines Administrator