

Cardiology Corner: Post-MI Dysrhythmias

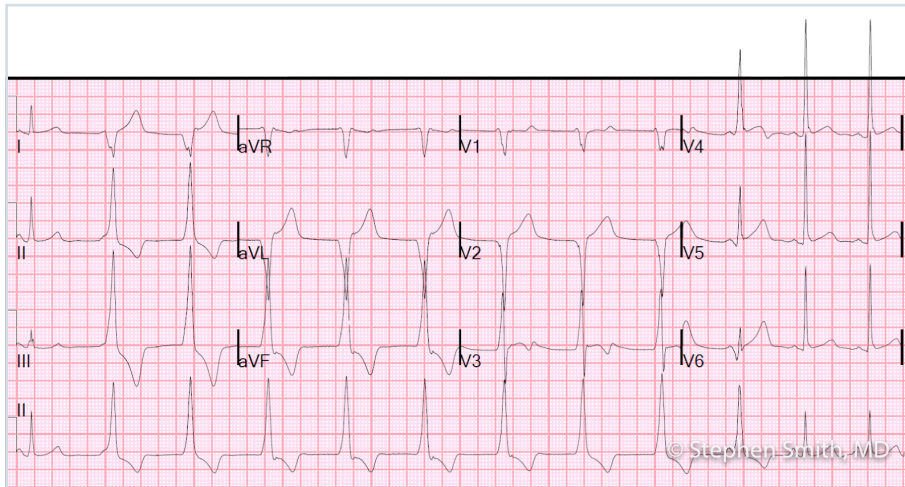
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- Ventricular dysrhythmias are common after myocardial infarction.
- Ventricular tachycardia (VT)
 - Non-sustained monomorphic VT (< 30 seconds)
 - No evidence that treating this dysrhythmia will decrease morbidity or mortality.
 - Clinicians should look for the underlying cause such as electrolytes or ischemia.

PITFALLS ♦

- Do not start patients with non-sustained monomorphic VT on antidysrhythmic medications.
- Sustained monomorphic VT (Lasting > 30 seconds or producing hemodynamic instability).
 - More likely due to myocardial scar than to myocardial ischemia.
 - Treatment:
 - If unstable - consider electrical cardioversion
 - If stable - consider antidysrhythmic. Lidocaine, amiodarone or procainamide would all be reasonable.
- Amiodarone may have more benefit as it has intrinsic beta blocking properties.
- Polymorphic VT (non-torsades de pointes)
 - These are not associated with a prolonged QTc.
 - They are almost always due to cardiac ischemia.
 - If unstable - consider electrical cardioversion
 - If stable - consider an antidysrhythmic. Lidocaine or amiodarone would all be reasonable.
 - Amiodarone may have more benefit as it has intrinsic beta blocking properties.
 - **If the patient is electrically cardioverted out of ventricular tachycardia, there is no need to start them on an antidysrhythmic medication infusion.**
 - **Beta blockers are useful post conversion as they suppress adrenergic surges.**
- Ventricular fibrillation (VF)
 - Treatment: Defibrillation
 - Post-conversion you do not need to start an antidysrhythmic medication infusion.
 - Beta blockers are useful post-defibrillation as they suppress adrenergic surges.

- Accelerated Idioventricular Rhythm (AIVR) -



- Looks like ventricular tachycardia but is slower (typically < 125-130 bpm).
- The traditional teaching was that this is a reperfusion rhythm.
 - Don't treat it with antidysrhythmics.
 - Presence of AIVR post-lytics means you have reperfused the vessel.
- A more contemporary teaching notes that AIVR is not a reliable sign of reperfusion.
 - Patients can reperfuse without developing AIVR and patients can have AIVR but not be reperfused.
 - **The presence of AIVR in a patient presenting with concern for acute coronary syndrome (ACS) should prompt cath lab activation.**
- Treatment: continue to evaluate for myocardial ischemia. **DO NOT administer an antidysrhythmic.**
- Prophylactic beta blockers
 - Clinicians do not need to administer beta blockers to ST elevation myocardial infarction (STEMI) patients who are not exhibiting ventricular ectopy.
 - Typically patients will be started on beta blockers by cardiology after catheterization.
- Supraventricular dysrhythmias
 - This is very uncommon in acute coronary syndrome (ACS).
 - Do not need to rule out patients with new onset atrial fibrillation or atrial flutter unless they have symptoms concerning for acute coronary syndrome.

Related content:

CorePendum chapter- Tachydysrhythmias:

<https://www.emrap.org/corependium/chapter/recGaV7ak0IY2bMIy/Tachydysrhythmias>