Post AMI risk stratification

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Clinical history

- Woman 71 y.o.
- Anterior acute myocardial infarction (AMI).
- Symptoms of heart failure, no chest pain.
- Post MI risk stratification (pre-discharge).
- Myocardial perfusion imaging with $^{99m}$Tc / dipyridamole.
Myocardial perfusion study
Quantitative results
The study findings are associated with:

a) Low risk for future cardiac events.
b) Moderate risk for future cardiac events.
c) High risk for future cardiac events.
d) Equivocal findings; artifact present.
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c) **High risk for future cardiac events.**

d) Equivocal findings; artifact present.

- There is transient LV dilation (TID), perfusion defects in >1 territory, low LVEF (31%) and RV uptake, all of which are associated with high risk of future cardiac events.
• Short axis slices depicting high-risk features: TID (A), perfusion defects (B, C), RV uptake (D).
Follow-up

• The patient underwent cardiac catheterization.
• Left main 90%, LAD 90%, LCx 70%, RCA 50%.
• Underwent CABG.
• At 6 months follow-up she had improved clinically.
Teaching points

- The aim of risk stratification in stable AMI survivors is to rapidly identify high-risk patients who might benefit from cardiac revascularization, and low-risk patients for whom medical therapy and early hospital discharge is appropriate.
- Revascularization does not improve outcome beyond medical therapy when there is minimal or no induced ischemia.
- Post MI, relative risk for cardiac events significantly increases as LVEF decreases: An LVEF ≥50% predicts a 1-year event rate of 5%, which reaches 27% in patients with an LVEF <20%.
Bibliography


