

Five Things Physicians and Patients Should Question

1

Avoid performing stress testing or advanced cardiac imaging to diagnose ischemic heart disease in the initial evaluation of patients who do not have cardiac symptoms and are not at high risk.

Asymptomatic, low-risk patients account for up to 45 percent of unnecessary “screening” for ischemic heart disease. Testing may be considered when high risk markers are present, such as diabetes in patients older than 40 years or peripheral arterial disease.

2

Avoid repeating stress testing, coronary CT angiography, or invasive coronary angiography within 2 years in asymptomatic patients or those with stable symptoms.

Performing coronary imaging or stress testing in patients without symptoms on a serial or scheduled pattern (e.g., every one to two years or at a heart procedure anniversary) rarely results in any meaningful change in patient management. This practice may lead to unnecessary invasive procedures and excess radiation exposure without any proven impact on patients’ outcomes. Exceptions to this rule include patients more than five years after a bypass operation, more than 2 years after a stenting procedure, or after having a stent placed in the left main coronary artery.

3

Avoid performing stress testing, coronary calcium scoring, or advanced cardiac imaging as part of preoperative cardiovascular risk assessment in patients scheduled for low-risk non-cardiac surgery.

Non-invasive testing is not useful for patients undergoing low-risk non-cardiac surgery (that is, with a <1% combined clinical/surgical perioperative risk of myocardial infarction or death, e.g., cataract removal, endoscopy). These types of tests do not change the patient’s clinical management or outcomes and could result in increased costs and unnecessary downstream procedures.

4

Avoid routine follow-up echocardiography in adult patients with mild native valvular heart disease and no or stable symptoms.

Patients with native valve disease usually have years without symptoms before the onset of deterioration. An echocardiogram is not recommended yearly unless there is a change in clinical status.

5

Avoid performing electrocardiography (ECG) screening as part of preoperative cardiovascular risk assessment in asymptomatic patients scheduled for low-risk non-cardiac surgery.

Despite potential value in having a pre-operative ECG to identify unsuspected cardiac abnormalities or as a comparison after a perioperative event, the likelihood of benefit for patients at low (<1%) risk of major cardiovascular events (death or myocardial infarction) is very small. Unnecessary ECGs can lead to needless consults, delays and changes to operative plans, which may counterbalance any potential benefit for the patient. In the absence of scientific studies establishing the value of a pre-operative ECG in a low cardiovascular risk population, the routine ordering of pre-operative ECGs prior to low-risk procedures should be discouraged.

How This List Was Created

The American College of Cardiology (ACC) asked its standing clinical councils to recommend between three and five procedures that should not be performed or should be performed more rarely and only in specific circumstances. ACC staff took the councils' recommendations and compared them to the ACC's existing appropriate use criteria (AUC) and guidelines, choosing items for the five things list that were either Rarely Appropriate AUC recommendations or Class III guideline recommendations. The ACC's Science and Quality Committee then reviewed and approved the final five items. ACC's disclosure and conflict of interest policy can be found at www.acc.org/about-acc/industry-relations/principles-for-relationships-with-industry

Sources

- 1 Wolk MJ, Bailey SR, Doherty JU, Douglas PS, Hendel RC, Kramer CM, Min JK, Patel MR, Rosenbaum L, Shaw LJ, Stainback RF, Allen JM. ACCF/AHA/ASE/ASNC/HFSA/HRS/SCAI/SCCT/SCMR/STS 2013 Multimodality Appropriate Use Criteria for the Detection and Risk Assessment of Stable Ischemic Heart Disease. *Journ Am Coll Cardiol.* 2014 Feb;63(4):380-406.
- 2 Wolk MJ, Bailey SR, Doherty JU, Douglas PS, Hendel RC, Kramer CM, Min JK, Patel MR, Rosenbaum L, Shaw LJ, Stainback RF, Allen JM. ACCF/AHA/ASE/ASNC/HFSA/HRS/SCAI/SCCT/SCMR/STS 2013 Multimodality Appropriate Use Criteria for the Detection and Risk Assessment of Stable Ischemic Heart Disease. *Journ Am Coll Cardiol.* 2014 Feb;63(4):380-406.
- 3 Wolk MJ, Bailey SR, Doherty JU, Douglas PS, Hendel RC, Kramer CM, Min JK, Patel MR, Rosenbaum L, Shaw LJ, Stainback RF, Allen JM. ACCF/AHA/ASE/ASNC/HFSA/HRS/SCAI/SCCT/SCMR/STS 2013 Multimodality Appropriate Use Criteria for the Detection and Risk Assessment of Stable Ischemic Heart Disease. *Journ Am Coll Cardiol.* 2014 Feb;63(4):380-406.
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- 5 Fleisher LA, Fleischmann KE, Auerback AD, Barnason SA, Beckman JA, Bozkurt B, Davila-Roman VG, Gerhard-Herman M, Holly TA, Kane GC, Marine JE, Nelson T, Spencer CC, Thompson A, Ting HH, Uretsky B, Wieveundersera D. 2014 ACC/AHA Guideline on Perioperative Cardiovascular Evaluation and Management of Patients Undergoing Noncardiac Surgery: A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines. *Journ Am Coll Cardiol.* 2014 December;64(22):77-137.
Or download the [ACC Guideline Clinical App](#)

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