

# Imaging:

## Stable Ischemic Heart Disease

### KEY QUESTIONS FOR APPROPRIATE TESTING

- 1. What are the clinical goals for imaging in this patient?**
  - Differential diagnosis
  - Rule out
  - Risk assessment reclassification
  - Inform therapeutic decision making
- 2. Can this information be obtained another way without imaging?**
  - History
  - Physical exam
  - Standard risk assessment
  - Labs
- 3. What will an abnormal result mean to the patient's probability of disease?**
  - Low pre-test probability – false positive rate much higher than true positive
  - Intermediate pre-test probability – test may help reclassify patient to higher or lower risk
  - High risk patients – test unlikely to alter probability but may inform treatment
- 4. Does the patient have any absolute or relative contraindications to imaging or subsequent treatment?**
  - Pregnancy
  - Renal insufficiency
  - Pacemaker
  - End-of-life
  - Allergies

### KEY DECISION VARIABLES FOR APPROPRIATE TESTING

- Patient risk factors (age, gender, symptoms, comorbidities, etc.)
- Symptom status
- Ability to exercise and ECG interpretability
- Procedure history
- Planned procedures

## TOP FOUR REASONS FOR WHICH SPECT MPI, CTA, STRESS MR AND STRESS ECHO ARE RARELY APPROPRIATE

- 1. Initial Evaluation: Symptomatic patients with low pre-test probability and no high risk factors who can exercise and have an interpretable ECG (SPECT MPI, CTA, and stress MR only)**
  - Case Example: Women without high risk factors and less than 50 years old with atypical or non-anginal chest pain or between 50 - 60 years old with non-anginal chest pain
- 2. Initial Evaluation: Asymptomatic patients with low global CAD risk**
  - Case Example: Men less than 45 years old and women less than 55 without a history of smoking, hypertension, family history, high HDL or low HDL
- 3. Post PCI: Asymptomatic patients less than 2 years after PCI**
  - Case Example: Annual scheduled SPECT MPI after PCI
- 4. Preoperative evaluation: Prior to low risk surgery**
  - Case Example: Preoperative screening prior to cataract surgery

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