Table 4

Investigations in patients with suspected stable angina

Anatomical	Imaging modality	Advantages	Disadvantages
CT coronary angiography	Ionising radiation	● High sensitivity and specificity for diagnosis of CAD ● Rapid ● Well tolerated ● Feasible on most contemporary CT scanners	● Radiation ● Incidental findings ● Limited functional information outside a research setting ● Image quality dependent on patient factors
Invasive coronary angiography	Ionising radiation	● Considered gold standard for diagnosis of CAD ● Can be combined with invasive FFR assessment to obtain accurate functional information	● Radiation ● Invasive (small risk of CVA, MI and bleeding)
Functional			
Exercise tolerance test	Surface ECG	● Inexpensive ● Readily available ● Well validated for prognosis ● No radiation	● Poor sensitivity and specificity for diagnosis of CAD ● Dependent on the patient's exercise ability
Stress echocardiography	Ultrasound	● Uses existing resources ● Readily available ● Well validated ● Permits assessment of cardiac function, viability, valves and extra-cardiac structures	● Imaging quality dependent on patient factors ● Dependent on the patient's exercise ability (dobutamine can be used) ● Modest sensitivity and specificity for diagnosis of CAD
Myocardial perfusion scintigraphy	Ionising radiation	● Well validated for prognosis	● Radiation ● Modest sensitivity and specificity for diagnosis of CAD ● Dependent on the patient's exercise ability (adenosine or dobutamine can be used) ● High false-negative rate in balanced ischaemia
Stress perfusion CMR	Nonionising (magnetic field and radio waves)	● High sensitivity and specificity for diagnosis of CAD ● Provides detailed assessment of cardiac structure and function	● Expensive and resource dependent ● Time consuming ● Some patients have poor tolerance

Key: CAD = coronary artery disease; CMR = cardiac magnetic resonance; CT = computerised tomography; CVA = cerebrovascular accident; FFR = fractional flow reserve; MI = myocardial infarction