

Diagnostic tools used for pathologies are reported in *Table 62*.

Personal communications (in date order) from Professor John Chambers, Guy's and St Thomas' Hospital, 7 July 2011; Dr Rick Steeds, University Hospital (Queen Elizabeth) NHS Foundation Trust, 8 July 2011; and Dr Guy Lloyd, Eastbourne Hospital, 11 July 2011.

TABLE 62 Diagnosis of pathologies

Category	Pathology	Diagnostic tools	
1	Structural defect	Atrial septal defect	TTE or TOE primary tool for investigation
		Ventricular septal defect	TTE primary tool for investigation
		Rupture of chordae tendineae or papillary muscle	TTE or TOE considered gold standard
2	Ischaemia/ thrombosis	LA thrombus (includes LAA thrombus)	TOE primary tool for investigation
		RA thrombus (includes RAA thrombus)	TTE or TOE primary tool for investigation
		Thrombosis of ventricle	TTE or TOE primary tool for investigation, may be used with contrast cardiac MRI
		Coronary artery atherosclerosis	For this, TTE/TOE would not be used for the primary investigation. TTE may be used in addition to other tests such as ECG, X-ray, blood tests, coronary angiography, MRI
		Aneurysm of heart	TTE primary tool for investigation, may be used with contrast cardiac MRI
3	Pulmonary disease	PE	For this, TTE/TOE would not be used for the primary investigation. PE is diagnosed on the history, serum fibrin degradation products levels and lung imaging with TTE providing additional risk stratification
		Pulmonary hypertension	For this, TTE/TOE would not be used for the primary investigation. RHC would be used. TTE may be used in addition to RHC
		Cor pulmonale	TTE or TOE primary tool for investigation
4	Endocarditis	Endocarditis	TTE or TOE primary tool for investigation

continued

TABLE 62 Diagnosis of pathologies (*continued*)

Category	Pathology	Diagnostic tools	
5	Valvular heart disease	Valvular regurgitation – mitral (mitral valve regurgitation, incompetence, insufficiency)	TTE or TOE considered gold standard
		Stenosis – mitral	TTE or TOE considered gold standard
		Mitral valve disease	TTE or TOE considered gold standard
		Valvular regurgitation – aortic	TTE or TOE considered gold standard
		Stenosis – aortic	TTE considered gold standard
		Valvular regurgitation – tricuspid	TTE considered gold standard
		Stenosis – tricuspid	TTE considered gold standard
		Valvular heart disease	TTE considered gold standard
		Pulmonary valve disease	TTE considered gold standard
6	Cardiomyopathy	Hypertrophic obstructive or non-obstructive or dilated	TTE primary tool for investigation, may be used with cardiac MRI
		LV non-compaction	TTE primary tool for investigation, may be used with cardiac MRI
7	Heart failure	CHF	TTE primary tool for investigation, may be used with cardiac MRI
		LV dysfunction or impairment	TTE primary tool for investigation, may be used with cardiac MRI or multigated acquisition scan
		LA enlargement	TTE primary tool for investigation
		RV dysfunction	TTE primary tool for investigation, may be used with three-dimensional TTE or cardiac MRI or first-pass nuclear medicine study
8	Diseases of arteries	Aortic dissection	For this, TTE/TOE would not be used for the primary investigation. CT or MRI may be used
9	Cardiac masses	Cardiac tumours or masses	TTE primary tool for investigation, may be used with cardiac MRI

RHC, right heart catheterisation.