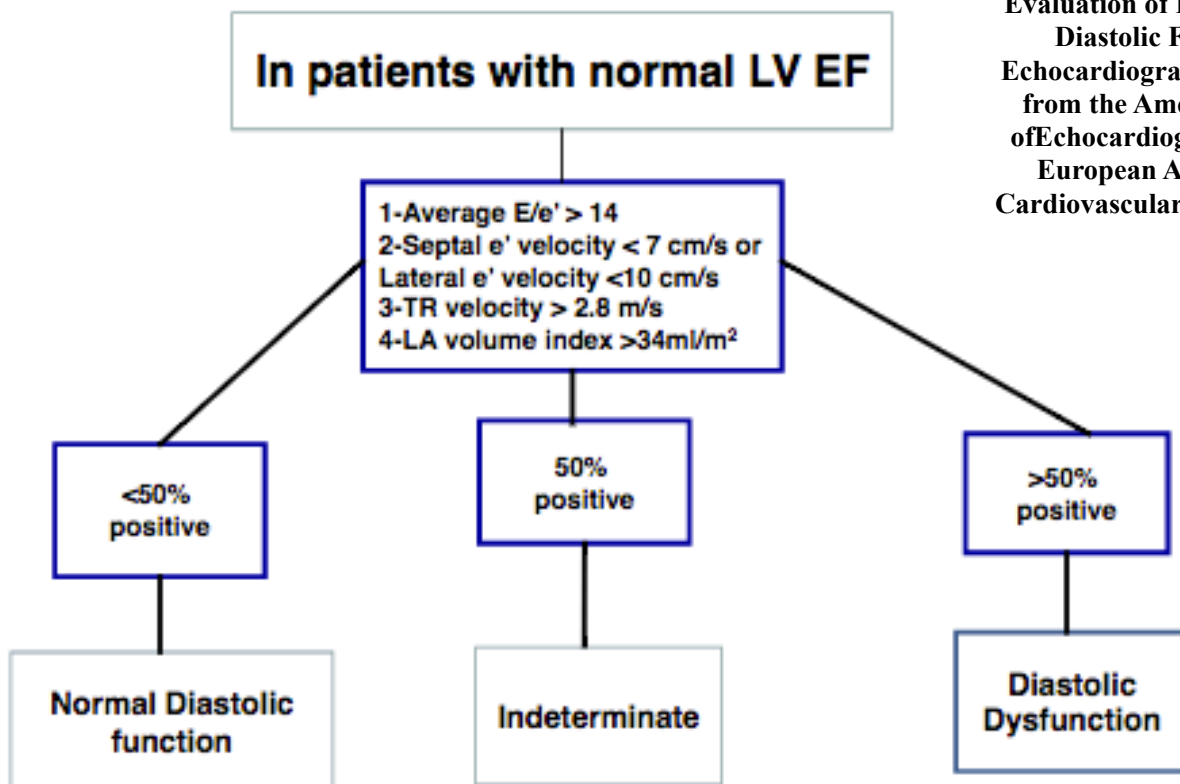
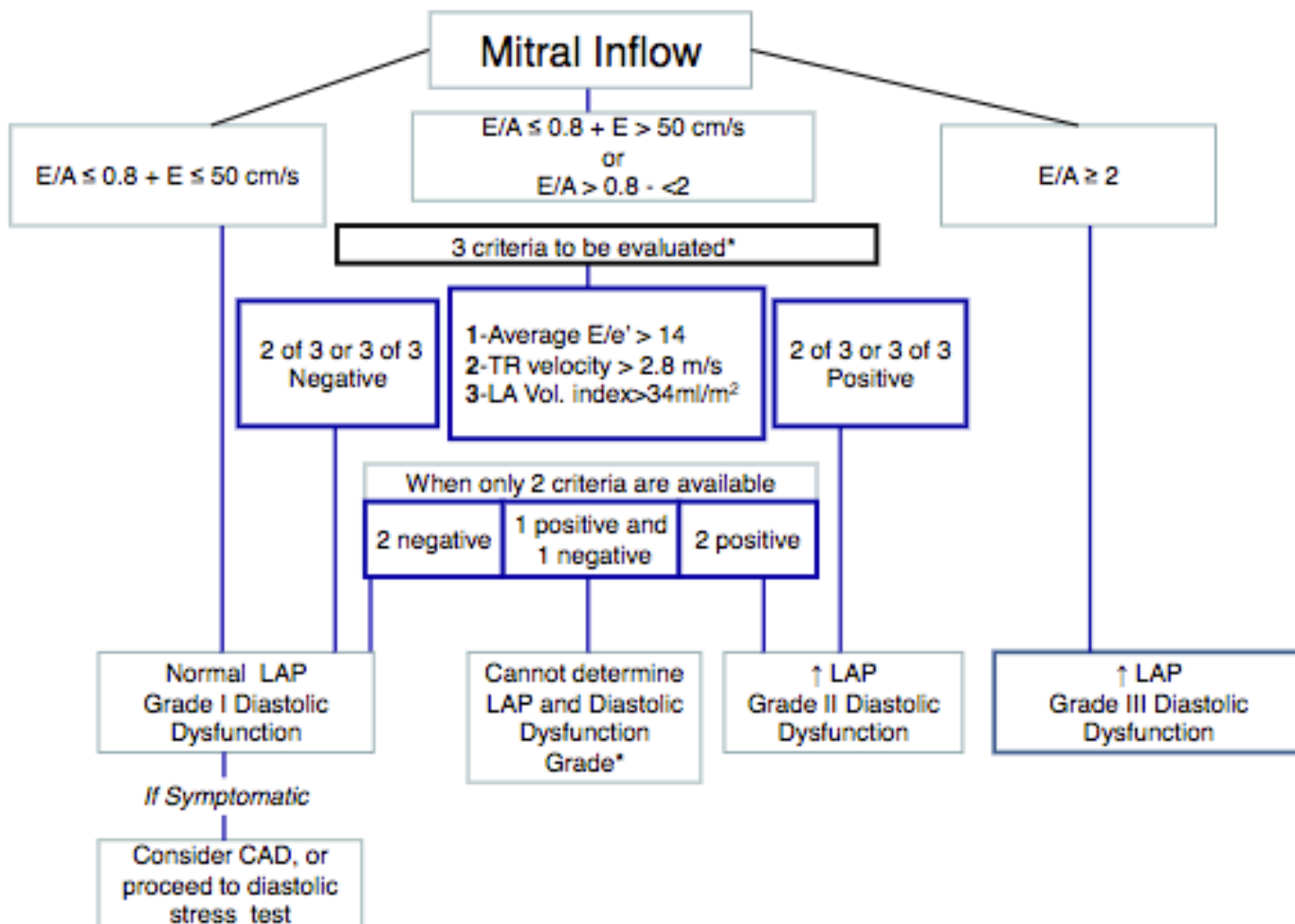


Ref: Recommendations for the Evaluation of Left Ventricular Diastolic Function by Echocardiography: An Update from the American Society of Echocardiography and the European Association of Cardiovascular Imaging (2016)

A



B



(* : LAP indeterminate if only 1 of 3 parameters available. Pulmonary vein S/D ratio <1 applicable to conclude elevated LAP in patients with depressed LV EF)

Table 6 Assessment of LV filling pressures in special populations

Disease	Echocardiographic measurements and cutoff values
AF ^{43,94-99}	Peak acceleration rate of mitral E velocity ($\geq 1,900$ cm/sec ²) IVRT (≤ 65 msec) DT of pulmonary venous diastolic velocity (≤ 220 msec) E/Vp ratio (≥ 1.4) Septal E/e' ratio (≥ 11)
Sinus tachycardia ^{41,44}	Mitral inflow pattern with predominant early LV filling in patients with EFs <50% IVRT ≤ 70 msec is specific (79%) Pulmonary vein systolic filling fraction $\leq 40\%$ is specific (88%) Average E/e' >14 (this cutoff has highest specificity but low sensitivity) When E and A velocities are partially or completely fused, the presence of a compensatory period after premature beats often leads to separation of E and A velocities which can be used for assessment of diastolic function
HCM ¹⁰⁰⁻¹⁰⁶	Average E/e' (>14) Ar-A (≥ 30 msec) TR peak velocity (>2.8 m/sec) LA volume (>34 mL/m ²).
Restrictive cardiomyopathy ^{13,107-109}	DT (<140 msec) Mitral E/A (>2.5) IVRT (<50 msec has high specificity) Average E/e' (>14)
Noncardiac pulmonary hypertension ³²	Lateral E/e' can be applied to determine whether a cardiac etiology is the underlying reason for the increased pulmonary artery pressures When cardiac etiology is present, lateral E/e' is >13, whereas in patients with pulmonary hypertension due to a noncardiac etiology, lateral E/e' is <8
Mitral stenosis ¹¹⁰	IVRT (<60 msec has high specificity) IVRT/T _{E-e'} (<4.2) Mitral A velocity (>1.5 m/sec)
MR ¹¹⁰⁻¹¹²	Ar-A (≥ 30 msec) IVRT (<60 msec has high specificity) IVRT/T _{E-e'} (<5.6) may be applied for the prediction of LV filling pressures in patients with MR and normal EFs Average E/e' (>14) may be considered only in patients with depressed EFs