

Constrictive Pericarditis versus Cardiac Tamponade

Both constrictive pericarditis (CP) and cardiac tamponade restrict or impede ventricular diastolic filling resulting in accentuated respiratory changes in right and left heart filling as well as increased ventricular interaction. However, despite these similarities there are important pathophysiological differences between CP and cardiac tamponade. The distinctive differences between these two entities are summarised below.

	Constrictive Pericarditis	Cardiac Tamponade
Haemodynamic consequence	Dissociation between the ITP and ICP due to isolation of the heart by the constrictive pericardial shell	Dissociation between the ITP and ICP due to ↑ IPP which impedes the transmission of ITP to the pericardial sac and the heart
Diastolic filling	Early diastolic filling is rapid; restricted ventricular filling occurs in mid-to-late diastole	Restricted filling occurs progressively over the entire diastolic period
Systemic venous return	Variable; prominent D velocities with a brief flow duration noted during baseline apnoea (reflects rapid early filling of the RV which is then rapidly abbreviated by the rigid pericardium)	Variable; D velocities less prominent and abbreviated compared with CP which become progressively diminished with increasing tamponade (reflects progressive pan-diastolic compression)