ultrasound VILLAGE

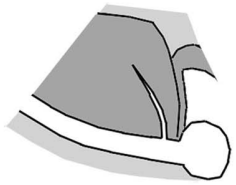
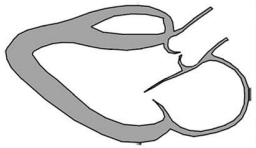
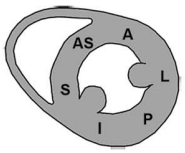
E-ECHO
Level 1 Emergency Echo

A limited echocardiographic study
To confirm or exclude several causes of cardiovascular instability including tamponade, massive PE, hypovolaemia, and LV systolic failure
It does not assess for all cardiac pathology and makes no attempt to evaluate for aortic dissection, ischamia or valvular dysfunction

PATIENT DETAILS

History _____ | Temp | Pulse | BP | Sats

Pre Study Differential Diagnoses _____

Standard Views	Key Questions	Tamponade	Massive PE	Hypovolaemia	Vasodilation	LV Systolic Failure	Notes
	**1 PERICARDIAL EFFUSION** Is there a pericardial effusion?	Yes	No	No	No	No	**Tamponade** It is a clincial diagnosis First RA systolic collapse Then RV diastolic collapse Dilated non-collapsing IVC
	**2 RIGHT VENTRICLE** Is the right ventricle normal?	May be Collapsing	Big and Round	N	N	N	**Massive Pulmonary Embolism** Big, round poorly contracting RV RV apex often normal or hyperdynamic Flattened septun (D-shaped LV in PSSX) Normal echo does not exclude PE Consider RV infarct (clinical / ECG) Consider chronic pulm hypertension (RV free wall thickness > 5 mm)
	**3 CVP** What is the central venous pressure?	↑	↑	↓	↓ if underfilled N if well filled	N to ↑	Right Atrial Pressure / IVC Size (mm) / Inspiratory Collapse ↑ : >25 mm : < 50 % Normal : 15-25 mm : Variable ↓ : < 15 mm : > 50 %
	4 LV DIASTOLIC SIZE What is the left ventricular size?	N	↓ to N	↓	↓ if underfilled N if well filled	N to ↑	Ventricular Size / LVEDd LV End Diastolic diameter (cm) ↑ : > 5.6 cm Normal : 3 – 5.6 cm ↓ : < 3 cm
	**5 LV SYSTOLIC FUNCTION** What is the left ventricular systolic function?	N	N to ↑	↑	↑	↓	LV Systolic Function / FS Fractional Shortening / EF Ejection Fraction ↑ : > 44 % : > 65 % Normal : 28 – 44 % : 50 – 65 % ↓ : < 28 % : < 50 %

Conclusions *NOTE: E-ECHO findings must be consistent with clinical suspicion; integrate history, examination, investigations, E-ECHO findings to reach a conclusion. Seek urgent formal echo if uncertainty remains*

Clinician: _____ Signature: _____ Date: _____