

Differentiating Shock Using the RUSH Exam

	Pump	Tank	Pipes
Hypovolemic	Hyperdynamic	Collapsing IVC Abdominal free fluid (possibly bleeding)	AAA/dissection
Distributive	Hyperdynamic in early sepsis Hypodynamic in late sepsis	Normal IVC	Normal
Obstructive	Tamponade RV strain (PE) Hypodynamic	No lung sliding, bar code sign (PTX)	DVT
Cardiogenic	Hypodynamic	Pleural Effusion	Normal

From Perera et al. The RUSH Exam: Rapid Ultrasound in Shock in the Evaluation of the Critically Ill. Ultrasound Clinics N Am 28 (2010) 29–56.

POCUS Exam Protocols

Protocol	Exams	Used In
RUSH	1. Parasternal Long Axis 2. Apical 4 Chamber 3. IVC 4. RUQ/Hemothorax 5. LUQ/Hemothorax 6. Bladder 7. Aorta 8. PTX (L and R)	Shock
E-FAST	1. RUQ 2. LUQ 3. Suprapubic Long. And Trans. 4. Subcostal	Trauma
FOCUS (Focused Cardiac Ultrasound)	1. Parasternal Long Axis 2. Parasternal Short Axis 3. Apical 4 chamber 4. Subcostal 4 Chamber 5. Subcostal IVC	Cardiac Assessment