EASy MAP Reference Card

Echocardiographic Assessment using Subxiphoid-only | 6 Views | MAP < 65 mmHg

The 6 Subcostal Views

View	Position	Assess	Key Findings
1. Subcostal 4-Chamber	Probe 2 cm below xiphoid Marker to patient's left (3 o'clock) Angle tail caudally	All 4 chambers Global LV & RV function Pericardium	LV size & squeeze RV:LV ratio Pericardial effusion Valve motion
2. Subcostal IVC	Rotate marker cephalad (12 o'clock) Same position Angle slightly left	Preload / volume status IVC diameter & collapsibility	Normal: 0.9-2.1 cm >50% collapse = fluid responsive Identify aorta to avoid error
3. Right Upper Lung	2nd ICS, right MCL Marker cephalad (12 o'clock)	Lung water Pleural sliding	A-lines = dry (normal) B-lines = wet (edema) No sliding = pneumothorax
4. Left Upper Lung	2nd ICS, left MCL Marker cephalad (12 o'clock)	Lung water Pleural sliding	Same criteria as View 3 Compare bilateral symmetry
5. Right Pleural	Right midaxillary line Marker cephalad Identify liver + diaphragm	Pleural effusion Consolidation	Spine sign = effusion Loss of curtain sign Hemothorax assessment
6. Left Pleural	Left posterior axillary line Marker cephalad Identify spleen + diaphragm	Pleural effusion Consolidation	Same criteria as View 5 Smaller window on left

Hemodynamic Phenotypes — Quick Overview

Cluster	Phenotype	Pattern	Think...
Cluster 1 (Small/Normal Cavity)	P1 Hypovolemic P2 Distributive P3 Diastolic Dysfunction	Small/normal LV Hyperdynamic Flat IVC (P1) / Normal (P2)	Hemorrhage Sepsis / Anaphylaxis HFpEF
Cluster 2 (Dilated LV)	P4 LV Cardiogenic P5 Biventricular Failure	Dilated LV, poor squeeze Plethoric IVC, B-lines	Acute MI End-stage CM
Cluster 3 (Dilated RV)	P6 Acute RV Failure P7 Acute-on-Chronic RV	RV > LV, septal shift RV thick wall (>1 cm)	Massive PE Pulm. Hypertension
Cluster 4 (Obstructive)	P8 Tamponade P9 Valve Catastrophe P10 Tension Pneumo	Effusion + collapse Visible valve lesion No lung sliding, plethoric IVC	Pericardial effusion Acute regurgitation Tension PTX / Auto-PEEP

Key Reminders

- Complete all 6 views in under 5 minutes using a phased array probe
- Always positively identify the aorta before assessing IVC collapsibility
- Compare bilateral lung findings for asymmetry
- Document phenotype, IVC status, and lung findings for each patient
- Re-assess serially after interventions (fluid bolus, vasopressors, intubation)

Reference: Howell-Clark et al. *JoVE* 2025; Bughrara et al. *Can J Anaesth* 2022 | easypocus.net