

IABP Care

● SKILL SNAPSHOT

Purpose

- Maintains safe intra-aortic balloon counterpulsation to improve coronary perfusion and reduce left-ventricular afterload.

When to use

- Temporary mechanical support for selected cardiogenic shock, ischemia, low-output states, or peri-procedural cardiac support.

Supplies needed

- IABP console/catheter; continuous ECG/arterial pressure monitoring; Doppler; pressure dressing; emergency console supplies; anticoagulation monitoring.

● PREP + PATIENT SETUP

- Verify catheter site, balloon size/depth confirmation, prescribed assist ratio/mode, trigger, and anticoagulation plan.
- Assess rhythm, hemodynamics, perfusion, chest/back/abdominal pain, and baseline distal

● VAULT TIP

- Every IABP check has three simultaneous views: patient perfusion, arterial waveform timing, and catheter/limb integrity.

● STEP-BY-STEP

1. Hand hygiene; identify patient; verify IABP console, connections, helium supply, power, and alarm function.
2. Trace catheter from insertion site to console; inspect for blood in tubing, kinks, migration, loose connections, or condensation.
3. Confirm ECG trigger and arterial waveform are clean and synchronized.
4. Assess timing: balloon inflation begins at diastolic notch/aortic valve closure; deflation occurs just before systole.
5. Verify expected waveform: augmented diastolic peak and reduced assisted end-diastolic/systolic workload.
6. Compare assisted/unassisted pressures and assess whether augmentation and perfusion are improving.
7. Monitor HR/rhythm because tachyarrhythmia, pacing, or artifact can disrupt timing; select trigger only per trained protocol.
8. Inspect insertion site for bleeding, hematoma, infection, securement, and catheter movement.
9. Assess affected and opposite extremity pulses, color, temperature, cap refill, sensation, movement, and pain at frequent intervals.
10. Maintain prescribed leg position/bed angle for femoral access; prevent hip flexion, traction, and catheter migration.
11. Monitor urine output, renal function, lactate, mentation, skin, platelets, hemoglobin, and anticoagulation.
12. Respond immediately to alarms. Stop/operate only according to device protocol and notify trained provider for blood in tubing, balloon leak, loss of augmentation, ischemia, or severe pain.

● SAFETY REMINDERS

- Blood in helium tubing suggests balloon rupture—stop per device protocol and notify immediately.
- Do not leave balloon inactive longer than device/protocol allows because of thrombosis risk.
- New limb ischemia or severe back/abdominal pain is urgent.
- Only trained clinicians change timing/mode.

● COMMON MISTAKES

- Accepting poor timing.
- No distal pulse checks.
- Hip flexion/femoral migration.
- Silencing alarms without cause.

● DOCUMENTATION

- Assist ratio/mode/trigger and timing.
- Hemodynamics and augmentation.
- Insertion site and distal neurovascular checks.
- Perfusion, urine, labs/anticoagulation.
- Alarms, interventions, response.