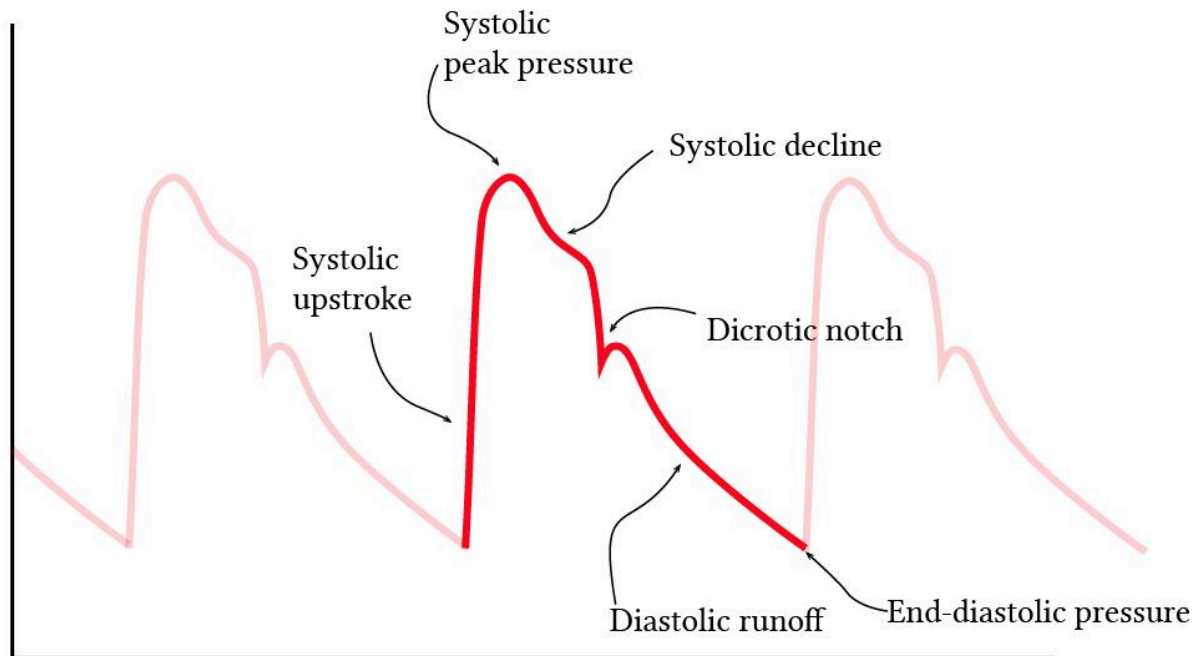


ARTERIAL LINE MONITORING REFERENCE SHEET



INDICATIONS	● Continuous blood pressure monitoring ● Hemodynamic instability ● Titration of vasoactive medications ● Arterial sampling (Not performed by CCT paramedic)
SYSTEM SETUP	● Pressure bag inflated to 300 mmHg ● Transducer leveled at phlebostatic axis (4th ICS, mid-axillary line) ● Flush system connected with continuous flow (3 mL/hr) ● Secure catheter and tubing

ARTERIAL LINE MONITORING REFERENCE SHEET

ASSESSMENT CHECKLIST	● Waveform: Clear, dicrotic notch visible ● Transducer position: Level with phlebostatic axis ● Pressure bag: 300 mmHg ● Line security: Connections tight, catheter stabilized ● Stopcock: in proper position ● Flush test (square wave test): For damping/accuracy
TRANSPORT COMPLICATIONS	● Flat/absent waveform → Check transducer position, tubing, or catheter ● Over/underdamped waveform → Check air bubbles, clots, tubing compliance, stopcock position ● Bleeding at site → Tighten connections, stopcock position, wrist position, apply pressure dressing ● Extremity ischemia → Assess color, temperature, capillary refill, pulse distal to site
TRANSPORT CONSIDERATIONS	● Ensure transducer remains level with heart ● Secure all tubing to avoid dislodgement ● Avoid excessive limb movement
DOCUMENTATION	● Site & waveform quality ● BP reading trends (systolic/diastolic/mean) ● Transducer level & flush function ● Interventions & patient response

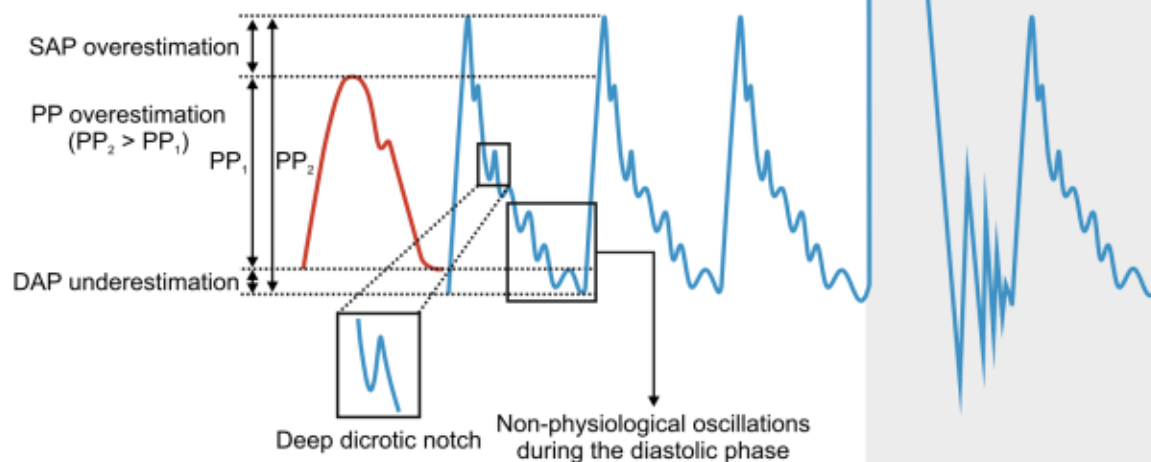
ARTERIAL LINE MONITORING REFERENCE SHEET

Damping: There are two main types of artifacts that can be seen on an arterial line tracing.

UNDERDAMPING	Systolic pressure overshoot with a narrow peak and non-physiological oscillations during the diastolic phase ● Potential causes ○ Artifact from catheter (catheter whip) ○ Tachydysrhythmias ● Overestimation of the systolic blood pressure ● Underestimation of diastolic blood pressure ● Wider pulse pressure
OVERDAMPING (MORE LOSS OF ENERGY)	Waveform loses its characteristic landmarks and appears unnaturally smooth with a diminished or absent dicrotic notch ● Potential causes ○ Air/Air bubbles in tubing ○ Kinks in tubing ○ Clots in tubing ● Underestimation of the systolic blood pressure ● Overestimation of the diastolic blood pressure ● Narrowed pulse pressure

ARTERIAL LINE MONITORING REFERENCE SHEET

Underdamped arterial blood pressure waveform



Normal, non-distorted waveform

(adequate dynamic response of the pressure transducer)

