

Clinical Tip



Arterial spasm or development of emboli from small blood clots that form on the tip or in the circulation adjacent to the tip of the catheter may occur when



Examples of impaired perfusion related to arterial lines

a UAC or other arterial line is in use. The area distal to the spasm or clot may show signs of impaired skin perfusion. Therefore, monitor the infant frequently for white, blue, or black discoloration of the skin on the back, buttocks, groin, abdomen, legs, feet or toes. If the line is in the radial artery, observe the hand and fingers for the same changes in perfusion and compare the warmth of the fingers to the hand without the arterial line. If there is a difference in skin temperature, this finding is also significant. Document your assessment to include presence of normal findings as well as any abnormal findings.



⚠ If any signs of impaired perfusion are observed, immediately notify the medical staff provider to discuss removal of the line. If the catheter stops functioning properly or evidence of vasospasm persists, there may be a thrombus at or near the catheter tip. Once the catheter is removed, monitor closely for improved perfusion. If perfusion does not improve, additional diagnostic studies and treatments should be considered, including: ultrasound, Doppler assessment, angiography, application of systemic or topical vasodilators, and/or treatment with tissue plasminogen activator. ¹²⁵