

IV Update

A Review of Vascular Access & IV Infusion Topics
March 2022

So Which Is It?

A Midline or a PICC?

Good question! Some midlines and PICC's look nearly identical once they are placed. The dressing is the same, the securement is the same, the location of placement on the arm is the same... so many things are the same. But they are NOT the same, and it is important that any nurse using these lines be able to distinguish between a midline and a PICC.

If you do not have access to the LINE INSERTION RECORD (which is the BEST way to know details about the line), what is the best way to tell what kind of device you are working with? **Midlines are labeled as Midlines on the device** – you just need to know where to look.



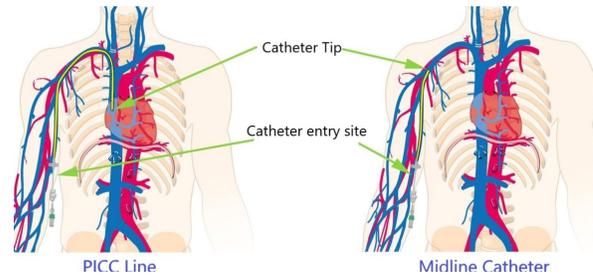
The Midline (or PowerGlide, which is a brand name) label may be on the hub or the lumen tubing itself. If it's hiding under the dressing, peel back the dressing to identify the line.

Drawing blood through a midline catheter:

- Drawing blood through any peripheral line (midlines ARE peripheral catheters) is likely to shorten the life of the line by causing trauma to the inside of the vein wall. This should be avoided if possible.
- Blood draws through peripheral lines are not permitted by many facility policies. Check your facility's policy before proceeding.

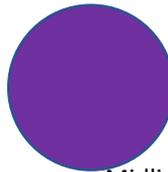
*We have a nurse on-call for questions, troubleshooting by phone or in person, or emergency vascular access 24 hours a day, seven days a week.
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Midline vs. PICC



The most important difference between a midline and a PICC line is the size and location of the vein where the distal tip resides.

- PICC lines are long tubes that travel through the basilic, brachial or cephalic vein of the arm passing through the axillary, supraclavicular, and brachiocephalic vein before reaching their final location in the superior vena cava.



Average diameter of the Superior Vena Cava 2.1 cm

- Midlines are much shorter, starting in the basilic, brachial or cephalic vein and ending just below the level of the armpit or axilla.



Average diameter of Basilic Vein of the upper arm 0.51 cm

Because of the substantial difference in the size of the vessel where the tip of each line resides, you as the care provider, can expect different performance from each line.

Midline	PICC
May or may not give blood return because of the relatively small vein size.	Should always have brisk blood return.
Infiltration (vein wall failure) is possible and even likely if midline is left in place for an extended period of time.	Risk of infiltration (vein wall failure) is negligible due to large vein size and rapid blood flow.
Generally, midlines should be replaced rather than de-clotted if thrombotic occlusion occurs. This is because eminent vein failure vs. thrombus is often difficult to differentiate.	May be de-clotted if thrombotic occlusion occurs.
Expected dwell time: 2-4 weeks.	De-clot should not be performed if PICC line infection is suspected.
	Expected dwell time: Up to 18 months.