

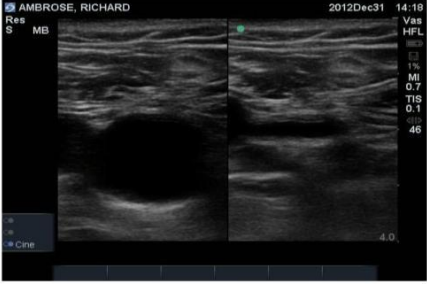
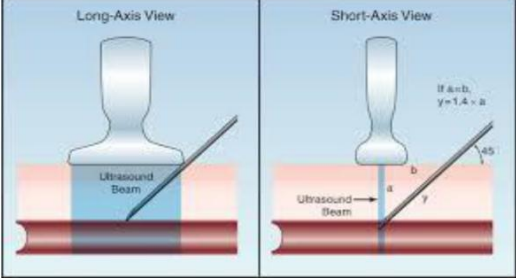
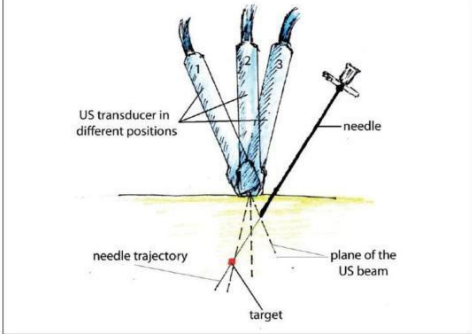
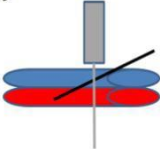
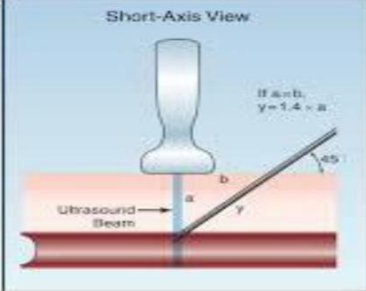


Minimum Dataset

Vascular Access - FAMUS Scan

From the Society of Acute Medicine Ultrasound Working Group

Steps	Image	Explanatory Notes
<p>Set up and prepare all your equipment</p>		<ul style="list-style-type: none"> • Tegaderm Dressing for Linear USS probe • Use longer cannula (at least 4 cm long) • Chloroprep
<p>Position USS device in line with limb</p>		<ul style="list-style-type: none"> • Consider device on opposite side of patient • You should be able to see Ultrasound screen and cannula at the same time
<p>Look for appropriate blood vessel</p>		<ul style="list-style-type: none"> • Veins are more oval and easily compressible • In elderly patients or low output states arteries might be compressible as well → compress slowly, arteries will be more pulsatile • Follow the vein with your ultrasound to understand course of vein for later insertion
<p>Decide on in plane / out of plane technique</p>		<ul style="list-style-type: none"> • In plane technique is better if vein and artery on top of each other, however vein need to be straight enough • Out of plane technique better when vein and artery next to each other
<p>Use either:</p> <ul style="list-style-type: none"> • Follow the needle approach 		<ul style="list-style-type: none"> • Move transducer first, then follow with needle until needle tip appears on Ultrasound screen (always keep ultrasound ahead of needle to avoid needle tip injuring deeper structures (i.e. artery in picture below))  <ul style="list-style-type: none"> • Repeat these steps until blood vessel is reached
<ul style="list-style-type: none"> • 45 degree angle 		<ul style="list-style-type: none"> • Depth of vessel (a) and insertion distance from ultrasound transducer (b) should be equal. • If an angle of 45 degrees is used, than needle should hit target
<p>The final steps are similar to cannula or central line insertion</p>		