

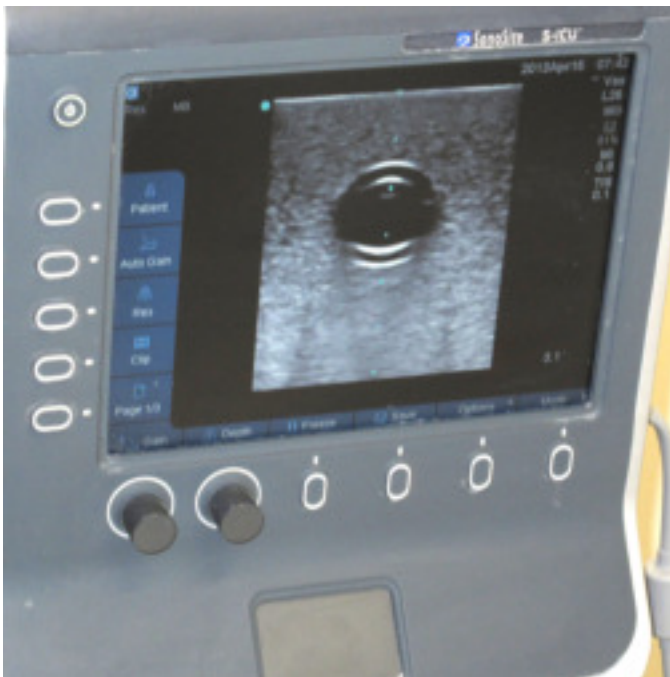
Ultrasound Guided Peripheral Venous Access



Peripheral Arm Simulator: To fill veins inject saline from syringes into blue luer locks



Step 1: Out of Plane. Position high frequency ultrasound probe with indicator to your left and hold with nondominant hand



Step 2: Visualize vein on ultrasound screen and optimize image by centering on screen and adjusting depth and gain



Step 3: Position needle in center of probe and puncture skin at a distance and angle that will allow visualization of the needle on ultrasound screen as needle punctures vessel



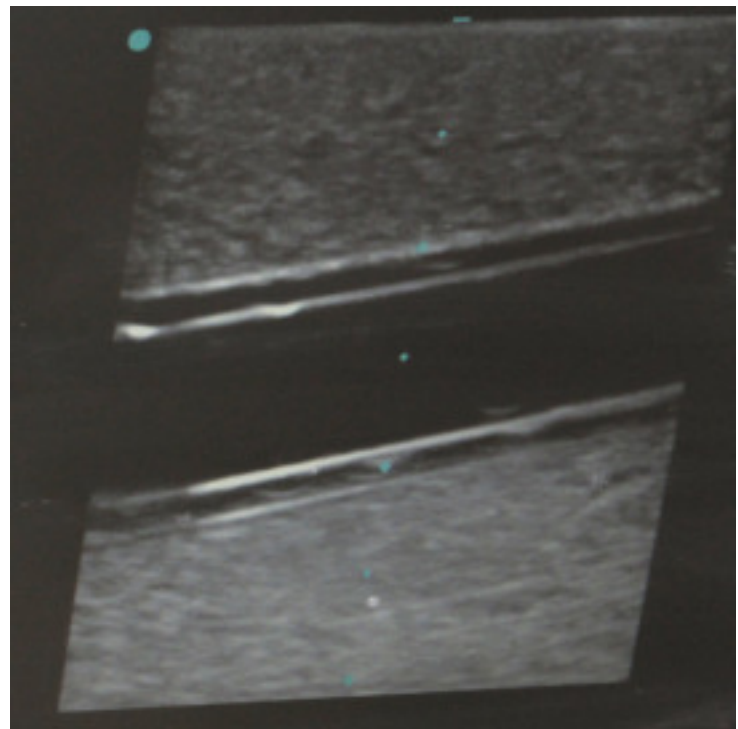
Step 4: Visualize ring down artifact of needle in vessel lumen as vessel is punctured under direct ultrasound visualization



Step 5: Confirm placement of needle in vessel by visualization of blood flash in chamber of syringe



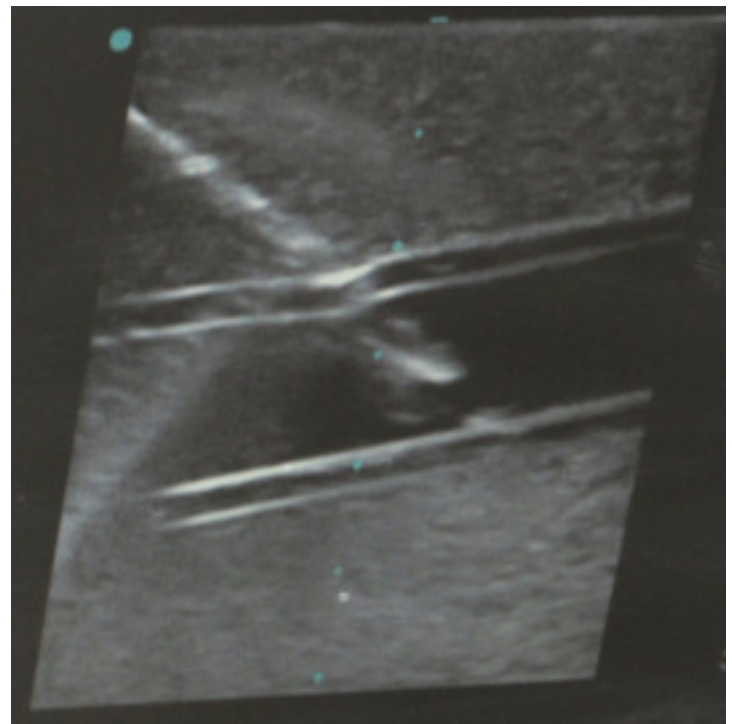
Step 6: In Plane. After rotating from out of plane view, position probe with indicator toward you and hold probe over vessel with nondominant hand



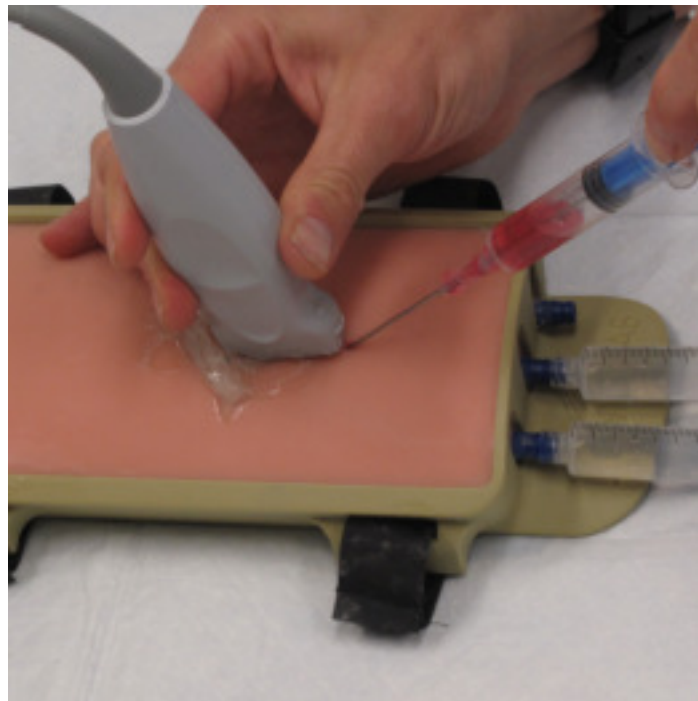
Step 7: Visualize vessel on ultrasound screen and optimize image by adjusting depth and gain



Step 8: Position needle directly behind and in midline of probe and enter skin at 30 to 45 degree angle parallel to probe



Step 9: Visualize needle entering vessel from upper left corner of ultrasound screen



Step 10: Confirm placement of needle in vessel by visualization of blood flash in chamber of syringe