

# ULTRASOUND GUIDED PROCEDURES

## Central venous access

Central access has multiple indications and ultrasound guidance can be helpful in many cases:

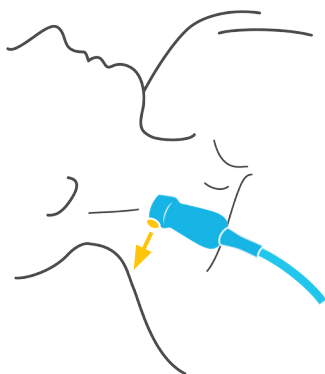
- difficult vascular access
- central venous pressure monitoring
- multiple ports

However, ultrasound guidance is most commonly used for securing internal jugular access.

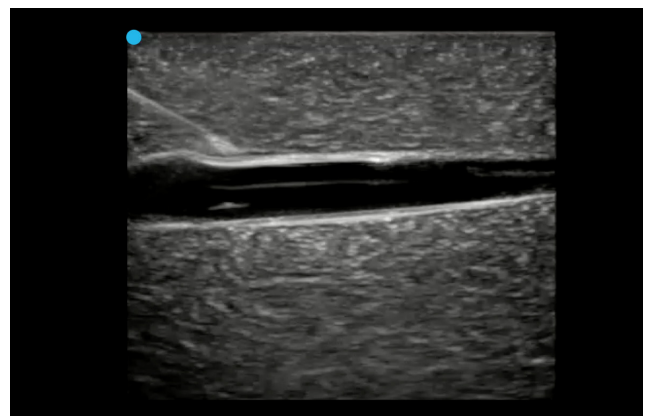
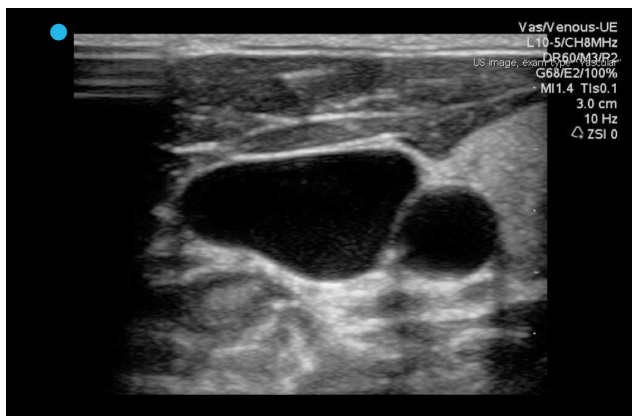
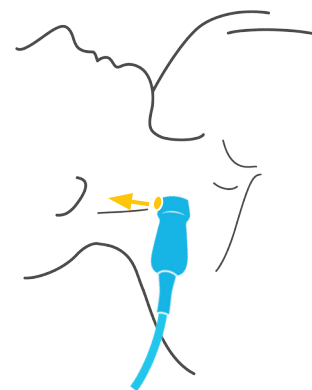
Using the linear probe in short or long axis, visualize the venous vessel (often larger) that will easily compress.



### Short-axis approach



### Long-axis approach



Note the distance from the skin to the vessel. Enter the skin, at a 45-degree angle, at the same distance away from the needle as the vessel is under the skin. This ensures that when you are about to puncture

the vessel your needle tip will be directly visualized under the probe. Remember to visualize your needle tip at all times.

