

Ultrasound Guidance for Central Line Placement or Nerve Blocks
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Small portable ultrasound machines are being used more frequently in the operating room for placement of central lines (large IV access in the major veins of the neck or under the collar bone) and for peripheral nerve blocks (procedures done to numb a section of the body for surgery or post operative pain control). Ultrasound allows your anesthesiologist to visualize the anatomy, including blood vessels and nerves, in the area he/she is working. When placing a central line, it is important to place the catheter in a vein (as opposed to an artery). The ultrasound aids your anesthesiologist in discriminating between these structures. It is also useful in central line placement for those patients who have had many central lines placed in the past. These patients are more prone to have narrowing of their veins that makes it difficult to place a catheter. If your anesthesiologist sees such a narrowing with the ultrasound, then he/she may look for a different site to place the catheter. Using ultrasound can decrease the risks/complications of central line placement.

Ultrasound can also help your anesthesiologist to visualize the nerves when doing a nerve block. When doing such a block, it is mandatory that your anesthesiologist does not inject the medication into a blood vessel. The success of the nerve block is dependent on bathing the nerve with the medication. By using ultrasound, your anesthesiologist can ensure that the medicine is deposited in the right area. Ultrasound can decrease the risks/complications of nerve blocks as well as decreases the failure rate of these procedures.