Ultrasound Guided Procedures

- There is a large body of literature for placement of ultrasound guided IVs in various populations by various providers with different skill levels.  

- Equipment required
  - Linear (high frequency probe)
  - IV Start kit, blood tubes, Connector, flush
  - Long catheter (48 mm preferred)
- Ensure a probe cover is used to maintain sterility.
- Patient positioning is essential.
- Choose your vein well. Unpaired veins (Cephalic, Basilic) are best.
- Greater than 20 ultrasound guided IVs placed suggests a reasonable level of competence to continue placing these independently.  

Additional Procedures:

- Paracentesis is best done after ~ 750 cc are in the abdomen with a success rate of 78%. Ultrasound raises the success rate from 65% to 95%.  
- Ultrasound guided thoracentesis seems to lower the rate of pneumothorax from 19% to near none in a small study.
- For all ultrasound guided procedures, after localizing ensure the patient does not move prior to needle insertion.

References


