

Southern Illinois Regional EMS System

II-4 INITIATION OF PERIPHERAL IV'S

Equipment needed:

- Gloves and PPE as needed.
- Intravenous cannula
- IV fluids.
- Infusion set.
- Extension set.
- Antiseptic cleansing solution (alcohol prep pad)
- Sterile dressing.
- IV securing device, either:
 - Adhesive tape cut into strips.
 - Commercial IV securing device.
- Tourniquet

Procedure:

- Don PPE
- Assemble all necessary supplies and equipment.
- Check IV fluids for:
 - Correct solution.
 - Expiration date.
 - Seal leakage.
 - Contamination.
 - Cloudiness.
- Connect the micro/macro drip tubing to the bag while the flow regulator is shut off:
- Fill fluid reservoir ½ way.
- Attach extension set if indicated.
- Open flow regulator wide open to “bleed” tubing.
- Check tubing completely for any air bubbles:
 - If present bleed tubing to clear.
- Select a suitable vein.
 - In general the forearm is the preferred site.
 - The back of the hand is preferred second.
 - Avoid the following:
 - Areas of bone articulation.
 - Areas where arterial pulsations are palpable.
 - Veins near of distal to injured areas.
 - Veins of the lower extremities.
- Secure the tourniquet proximal to the selected IV site.
 - Check to make sure that distal pulse is still present. If not:
 - Loosen tourniquet slightly.
- Prepare the venipuncture site:
 - Cleanse with antiseptic cleaning solution.
 - Start from the area above the puncture site and wipe in widening circles around it, allowing a broad margin around the site to be punctured.
 - If using Iodine, a final wipe with Alcohol is recommended.
 - If time permits, allow the alcohol to dry to reduce pain on initiation of IV
 - Do not wipe or fan dry.

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II-4 INITIATION OF PERIPHERAL IV'S (continued)

- Perform venipuncture
 - Stabilize the vein by applying pressure on the skin distal to the point of entry.
 - With the bevel of the needle up, pass the needle through the skin and enter the vein from either side or above.
 - You should be able to feel the needle “pop” through the vein.
 - When the needle has entered the vein, there will be a blood return through the needle.
 - Using the over-the-needle catheter, advance the needle about 2mm beyond the point where the blood return was first encountered.
 - Carefully withdraw the needle, holding the catheter steady.
 - DO NOT RECAP THE NEEDLE:
 - Dispose of the needle in an approved puncture resistant bio hazard container.
 - Release the tourniquet.
 - Attach the IV tubing and open the clamp to permit unimpeded flow.
 - The fluid should flow freely in a steady stream into the infusion reservoir.
 - If the flow appears minimal:
 - Pull back slightly on the catheter, as the tip may be against the wall of the vein.
 - When good flow has been established:
 - Secure the catheter in place using tape or a commercial IV securing device.
 - Loop the IV tubing and secure it to the arm.
 - Adjust the flow rate of the infusion per order or protocol