Intravenous Fluids Procedure

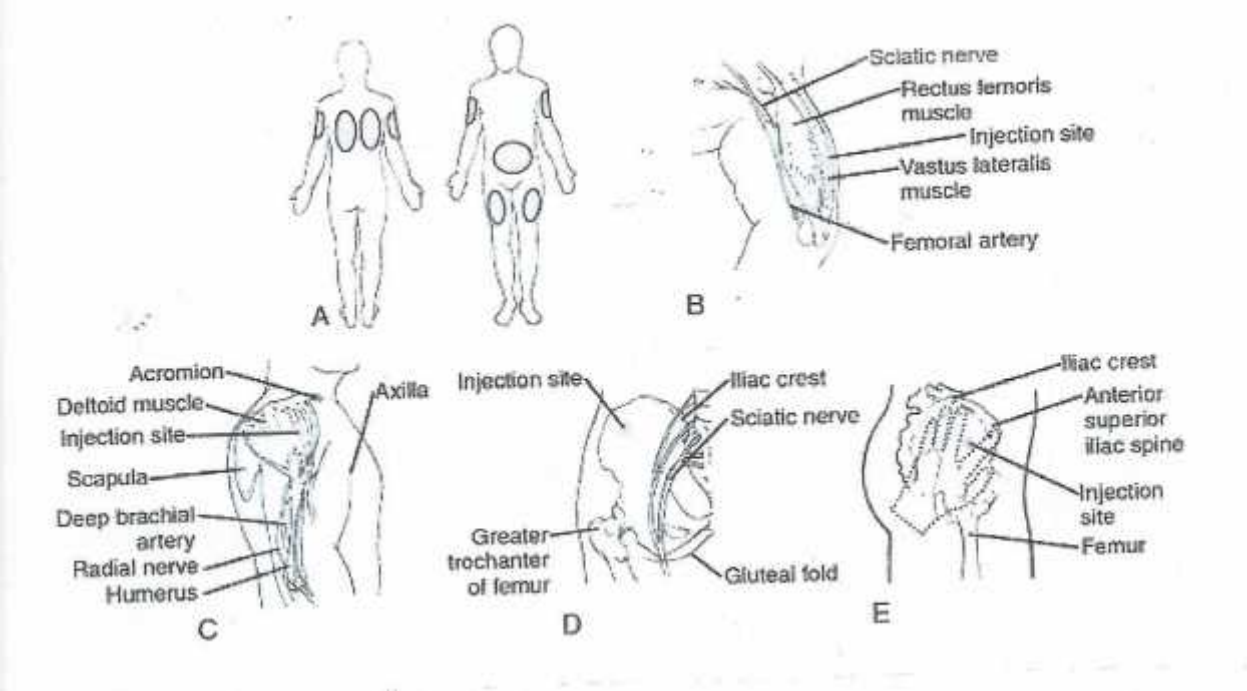
There are several acceptable procedures for establishing IV infusion. **The main points of all of them is to position the needle properly into the vein and be sure that no air bubbles remain in the line or needle prior to starting the flow.**

Supplies

- IV Fluids solution: normal saline or D5W (5% dextrose)
- IV tubing and administration set,
- Needle (20 or 21 gage x 11/2 – 2 inches long)
- Alcohol wipes or sponges
- Tourniquet band
- Arm board
- Medical tape.

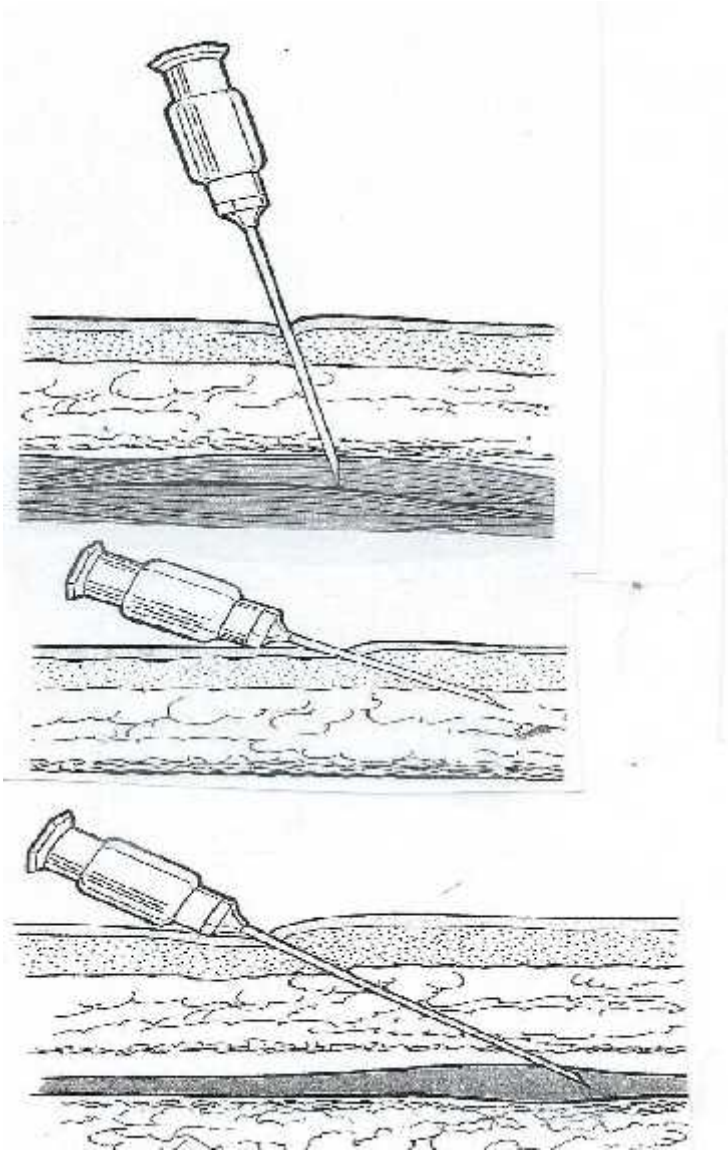
Procedure

1. Remove the cover from the diaphragm on the IV solution bag
2. Close the pinch-valve on the IV tubing (best to position the pinch-valve near the lower end of the tubing)
3. Insert the spike on the end of IV tubing into the diaphragm
4. **Hang the IV bag and open the pinch-valve to let fluid flow until all of the air bubbles are gone then close the valve**
5. Position the IV setup near to the patients head
6. Cut several pieces of tape about 2-3 inches long
7. Secure the patents arm to a board with infusion site up.
8. Apply a tourniquet band 2-inches above the infusion site
9. Have the patent open and close his/her fist
10. **Clean the infusion site with alcohol**
11. Press the thumb down on the vein about 2-inches below the infusion site
12. Install the needle onto the lower end of the IV tubing
13. **Open the pinch-valve and let fluid flow through the needle and close the valve. Check for bobbles.**
14. Insert the needle through the skin near parallel to the skin and in line with the vein
15. When blood backs-up into the need and tubing insert the needle ¾ to 1 inch further, open the pinch valve. **Caution use care not to go *through* the vein**
16. Remove the tourniquet band.
17. Tape the needle and tubing securely to the arm
18. Position the pinch-valve below the drip chamber and adjust flow as needed

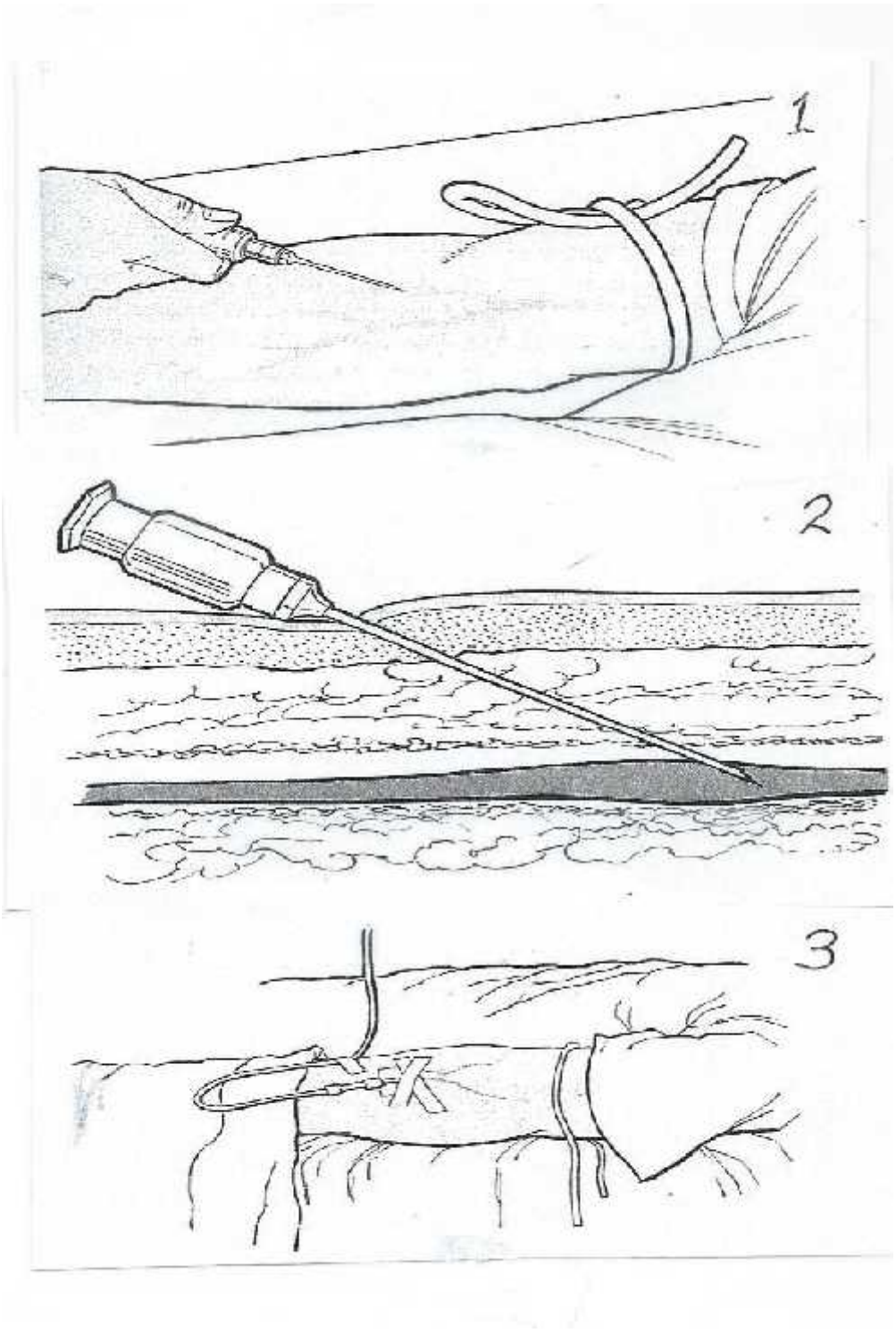


This illustration shows the most common sites for intramuscular injections

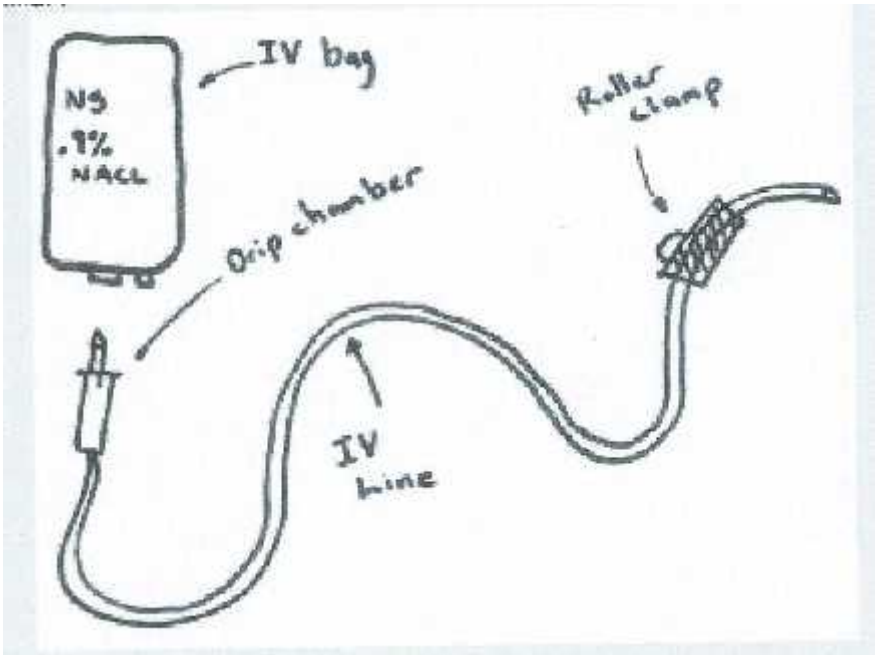
The above illustration shews the angle and location for intravenous injections and for the establishment of IV fluid line injection.



Above are illustrated (top to bottom) the proper angle and depth for intramuscular, subcutaneous and intravenous injections



Steps to establishment of an IV line



Simplified illustration of an IV setup