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Intravenous Catheter Placement

Introduction

- Basic nursing skill.
- All nurses are required to insert IV's.
- Requires patience, a steady hand, and compassion.

Where to Begin?

- Reviewing the physicians order
- Identifying the patient and explain the procedure
- Choosing the correct cathalon size
- Choosing the correct site for insertion
- Insertion of the intravenous catheter.

Physicians Order

Reviewing the doctors order is the first step before proceeding with any task.

Nurses are required to have an order for all invasive tasks.



Explaining the Procedure

- Introduce yourself
- Ask patients name and date of birth
- Check the armband
- Explain the doctors order and what you will be doing.



Choosing the Correct Cathalon size

IV Catheters



CHART

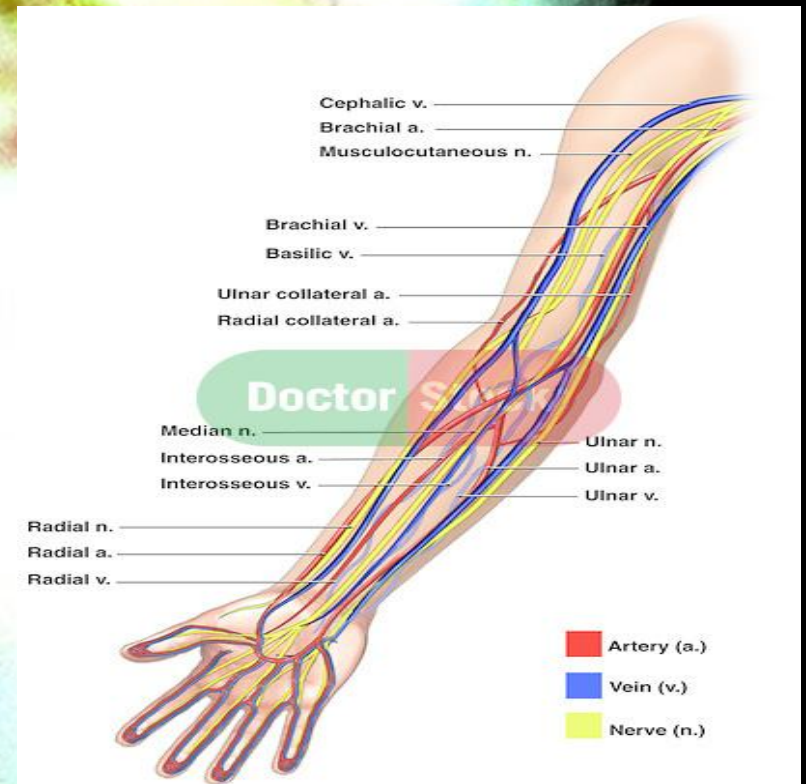
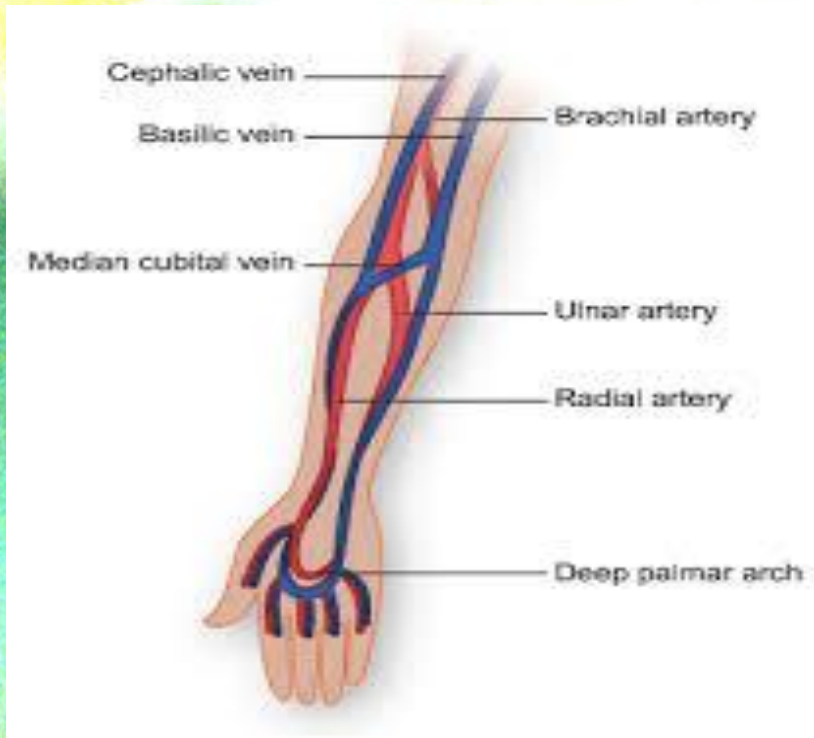
SPECIFICATIONS				
Gauge	Colour Code	Ext. Dia. mm	Length mm	Flow Rate ml/min
14G	Orange	2.1	45	240
16G	Grey	1.8	45	180
18G	Green	1.3	32/45	90
20G	Pink	1.1	32	60
22G	Blue	0.9	25	36
24G	Yellow	0.7	19	20
26G	Violet	0.6	19	13

Site of Insertion

Hand, Forearm, and AC

Never stick a pulsating site!

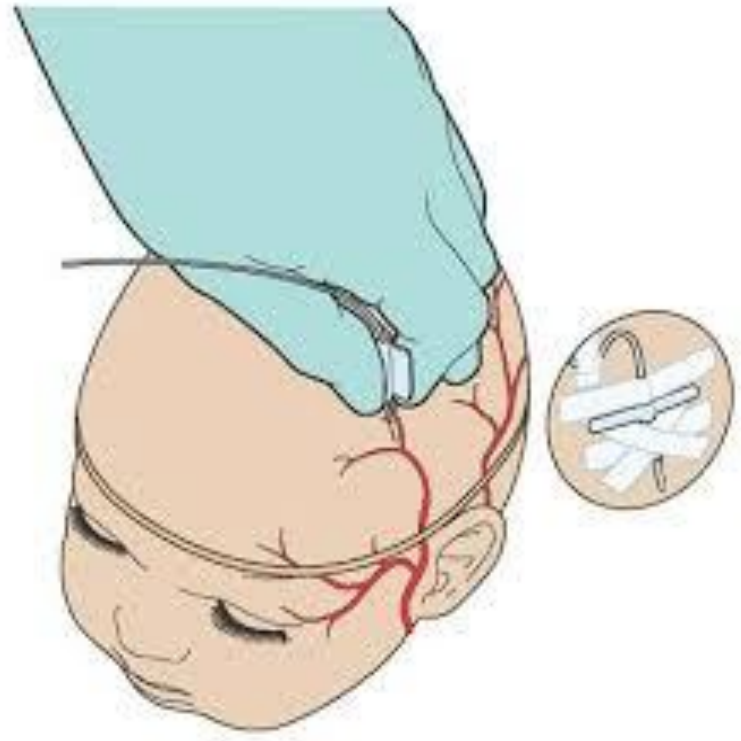
Distal to Proximal



Site of Insertion

Scalp Veins

- **One of the best sites for sticking infants.**
- **Requires skill and practice to perform**



Insertion of the IV

- Gather supplies
- Prepare the solution
- Tying the tourniquet
- Insertion
- Checking correct placement
- Signs of infiltration

Supplies

- IV start kit will include:
- Tourniquet
- Tape
- Alcohol prep
- Tegaderm
- INT
- You will also need a 10ml syringe of NS



Solutions

There are several types of solutions please go by your physicians orders

- **NS**
- **½ NS**
- **D5**
- **D5W...ect**



Iv Tubing

- Continue flow
- Microdrip
- Secondary set
- Blood tubing



Tying a Tourniquet

Release Technique

- Takes practice and skill
- Can practice on your thigh
- Need to be able to release with one hand
- Not too tight
- Not too loose
- Be sure you untie the tourniquet when you are finished!!

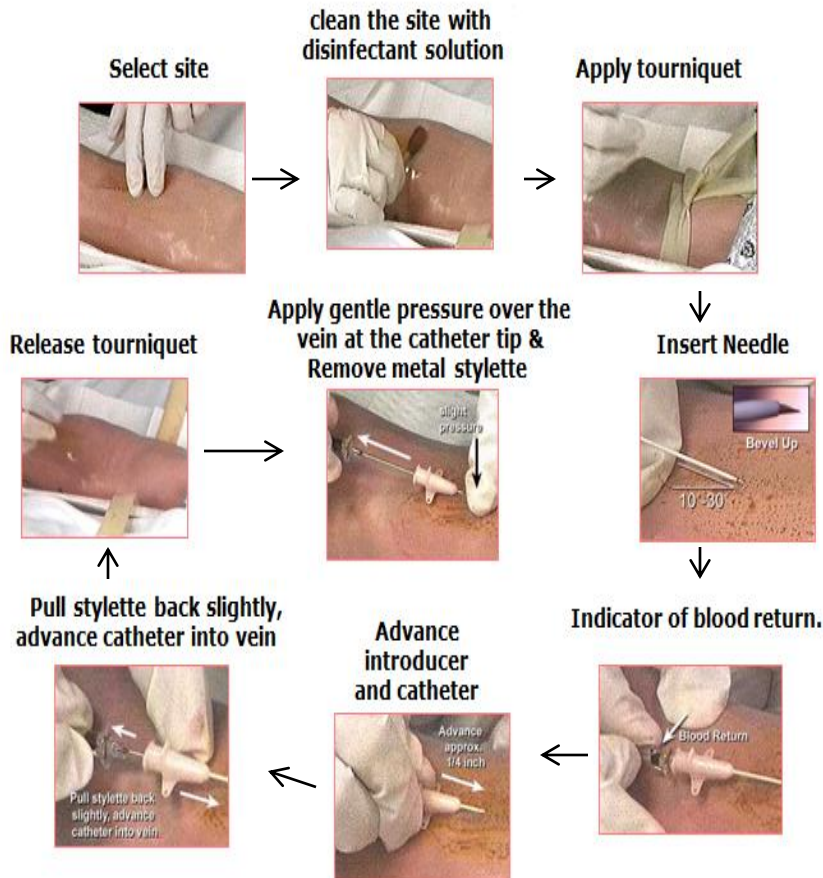


Insertion of IV

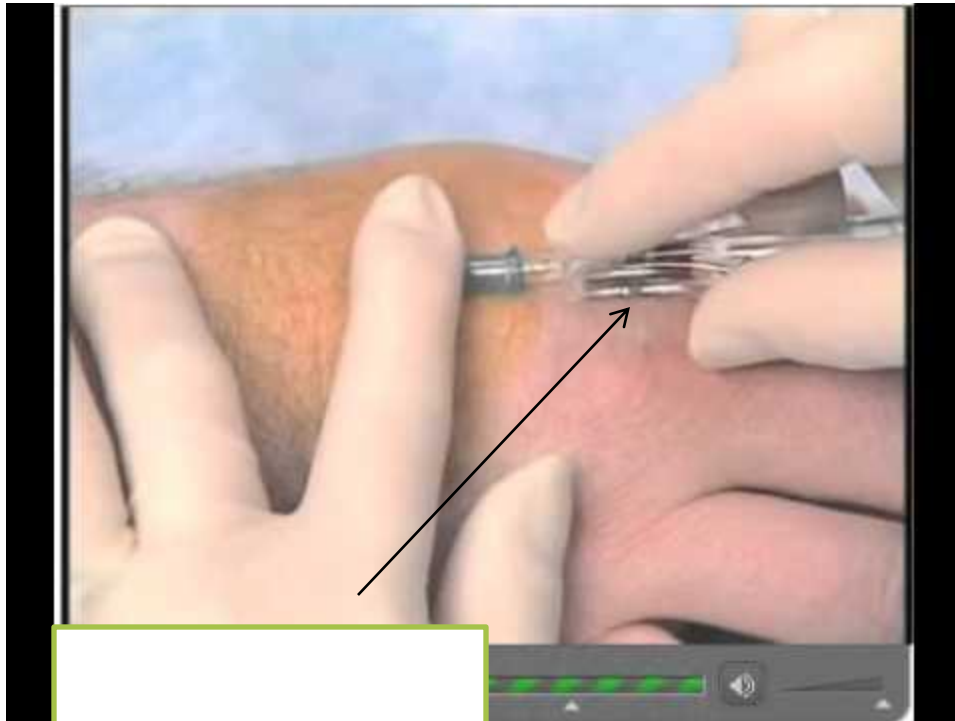
WASH YOUR HANDS!

PUT ON GLOVES!

- Start at 10-30 degree angle, depending on the site and depth of the vein
- Once you enter the skin start superficial and can go deeper as needed
- Once in the vein blood will flash in the cathalon
- Flatten out the needle advance the cathalon
- Success!!



Checking Placement



Blood Return

INT after placement



Flush the IV
after
advancing the
cathalon
and attaching
the INT

INT

Infiltration/Missed IV

- **Ask the patient if it burns and look for signs of infiltration**
 - Redness
 - Burning
 - Swelling
 - Bruising from a blown vein



Video

- <http://www.youtube.com/watch?v=F-pNugnGzmY>