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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 Catheter size

## IV Catheters



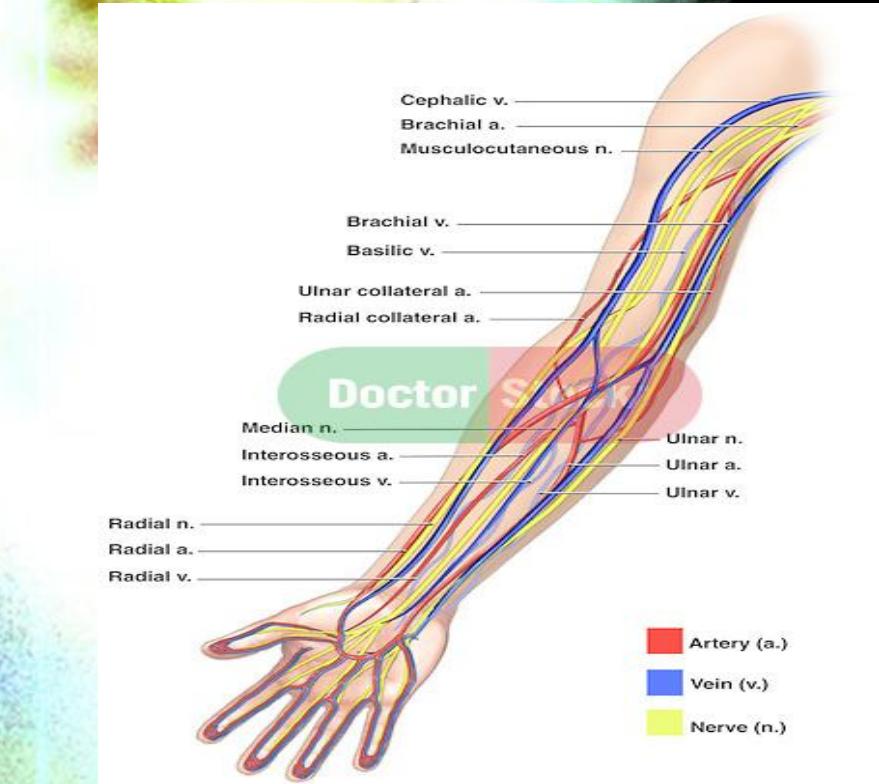
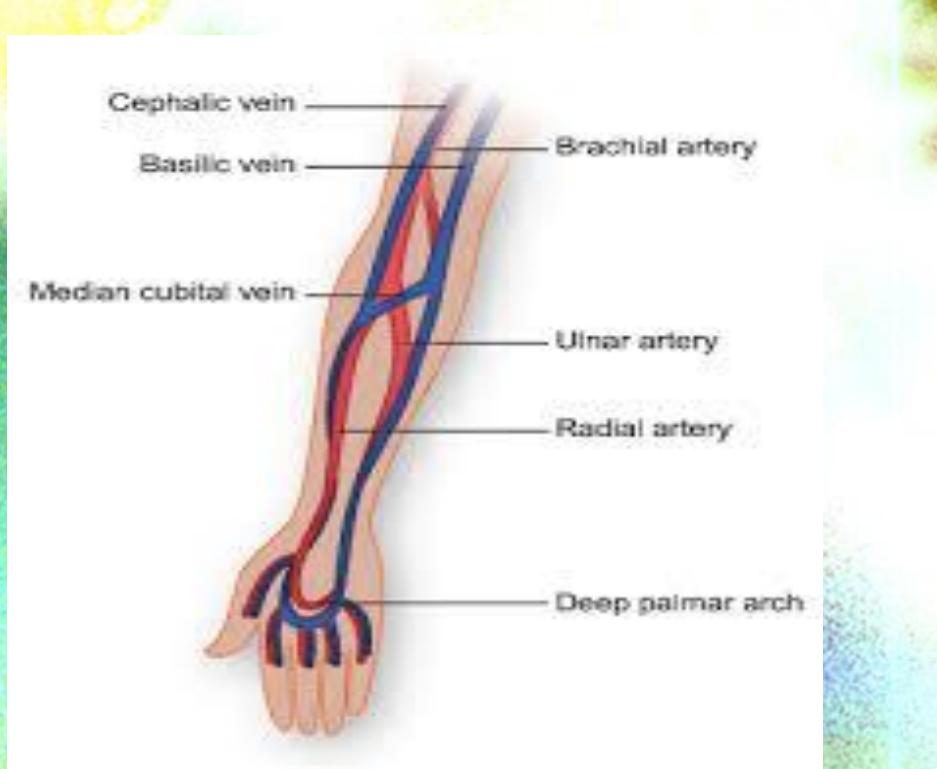
## CHART

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!

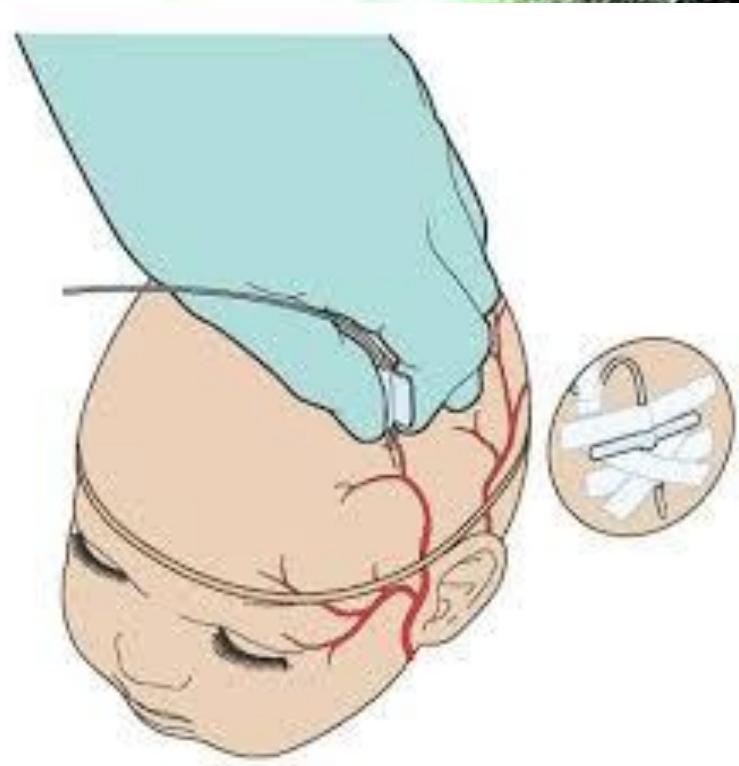
Distal to Proximal



# 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
- $\frac{1}{2}$  NS
- D5
- D5W...ect



# Iv Tubing

- Continue flow
- Microdrip
- Secondary set
- Blood tubing



# Tying a Tourniquet

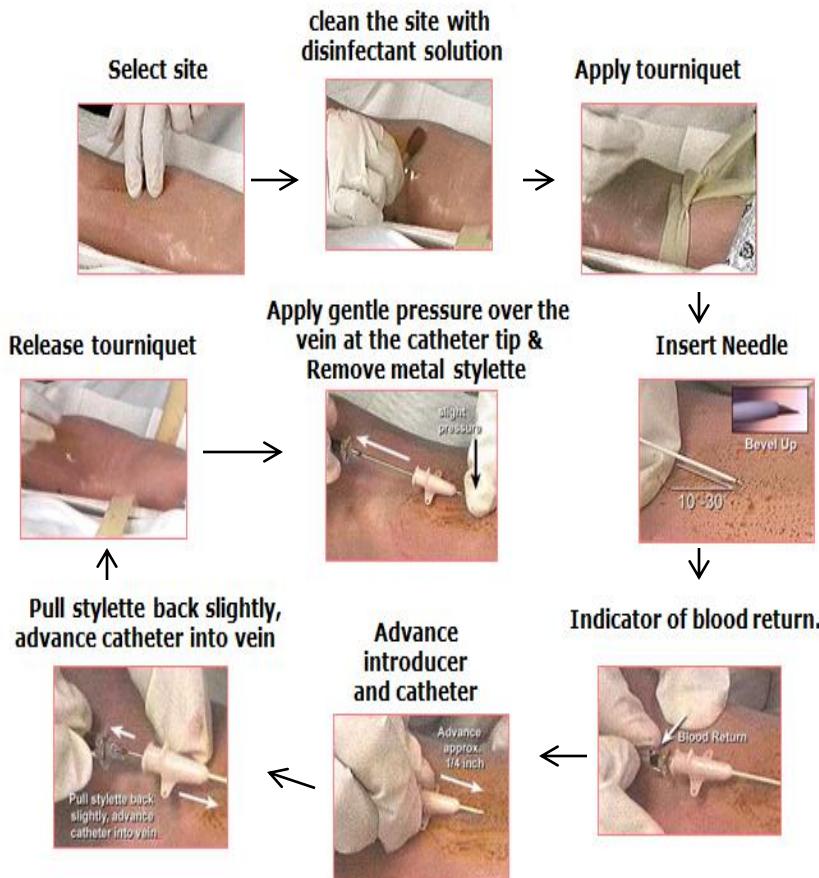
## Release Technique

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



# Insertion of IV

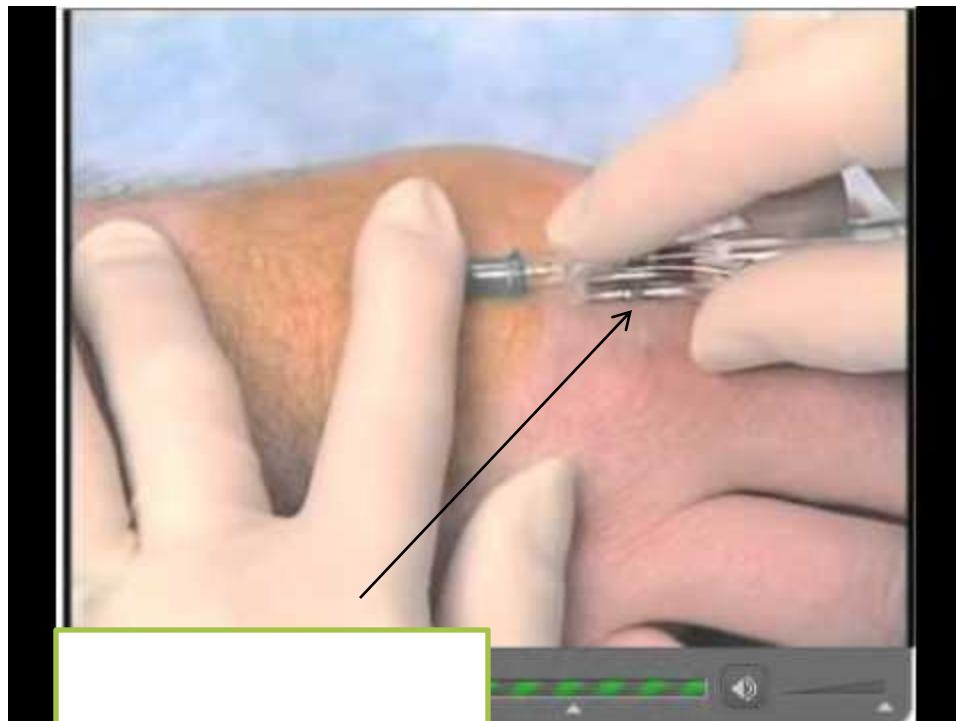
**WASH YOUR HANDS!**



**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

# 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>