

Inserting an Emergency Umbilical Vein Catheter using a 3-way Stopcock

Prepare and perform procedure as rapidly and as cleanly as possible								
	1	2	3	4	5	6	7	8
	Prepare Meds	Prepare to Insert	Prepare Site	Tie Tape	Cut Cord	Insert UVC	Inject Meds	Secure Catheter
Equipment	<ul style="list-style-type: none"> <input type="checkbox"/> Rapid fill connector or 3-way stop cock <input type="checkbox"/> Epinephrine 0.1 mg / mL <input type="checkbox"/> 1 mL syringe <input type="checkbox"/> 30 mL syringe for volume <input type="checkbox"/> 0.9% NaCl and/or PRBC 	<ul style="list-style-type: none"> <input type="checkbox"/> UVC kit <input type="checkbox"/> Sterile gloves <input type="checkbox"/> 3-way stopcock <input type="checkbox"/> Syringe with 10 mL 0.9% NaCl <input type="checkbox"/> Umbilical catheter Size 5 French 	<ul style="list-style-type: none"> <input type="checkbox"/> Chlorhexidine 2% swab sticks <input type="checkbox"/> Sterile drape 	<ul style="list-style-type: none"> <input type="checkbox"/> Umbilical tie tape 	<ul style="list-style-type: none"> <input type="checkbox"/> Scalpel with blade 	<ul style="list-style-type: none"> <input type="checkbox"/> Forceps <input type="checkbox"/> Dilator (optional) <input type="checkbox"/> Gauze 		<ul style="list-style-type: none"> <input type="checkbox"/> 3.0 or 4.0 silk suture set <input type="checkbox"/> Needle driver <input type="checkbox"/> Scissors <input type="checkbox"/> UVC securement device or ½" hypoallergenic tape
Procedure	<ul style="list-style-type: none"> <input type="checkbox"/> Remove all yellow caps from epinephrine vial and injector <input type="checkbox"/> Attach rapid fill connector or 3-way stopcock to green barrel <input type="checkbox"/> Attach 1mL syringe to rapid fill connector or 3-way stopcock <input type="checkbox"/> Thread vial into injector <input type="checkbox"/> Draw up Epinephrine 0.2mL/kg in 1 ml syringe <input type="checkbox"/> Prepare volume (0.9% NaCl and/ or PRBC) 	<ul style="list-style-type: none"> <input type="checkbox"/> Open UVC kit and add supplies (sterile technique) <input type="checkbox"/> Put on sterile gloves <input type="checkbox"/> Attach catheter to 3-way stopcock <input type="checkbox"/> Attach 10mL 0.9% NaCl syringe to stopcock <input type="checkbox"/> Flush catheter and 3-way stopcock ports <input type="checkbox"/> Close 3-way stopcock 	<ul style="list-style-type: none"> <input type="checkbox"/> Ask assistant to hold cord up taut <input type="checkbox"/> Quickly clean cord once at cut site with 2% chlorhexidine* <input type="checkbox"/> Lay down single sterile drape below umbilical cord over lower abdomen and legs 	<ul style="list-style-type: none"> <input type="checkbox"/> Place tie tape around cord as close as possible to the skin line <input type="checkbox"/> Using a single overhand knot, tighten only enough to prevent bleeding 	<ul style="list-style-type: none"> <input type="checkbox"/> Cut cord above tie tape, leaving about 2 cm length of cord from skin line. 	<ul style="list-style-type: none"> <input type="checkbox"/> Identify umbilical vein <input type="checkbox"/> Insert catheter into UV 2 to 3 cm beyond abdominal wall (approx. 5 cm total, less for smaller babies) <input type="checkbox"/> Aspirate until blood return <input type="checkbox"/> Hold UVC in place with fingers until secured 	<ul style="list-style-type: none"> <input type="checkbox"/> Attach 1 mL epinephrine syringe to med port <input type="checkbox"/> Open 3-way stopcock to epinephrine <input type="checkbox"/> Push (rapid) epinephrine <input type="checkbox"/> Open stopcock to 0.9% NaCl and flush with 3mL (rapid) <input type="checkbox"/> Close stopcock 	<ul style="list-style-type: none"> <input type="checkbox"/> Secure UVC once resuscitation is completed <input type="checkbox"/> Suture catheter to cord prior to moving baby <input type="checkbox"/> Apply bridge tape or alternative securement method <input type="checkbox"/> Clean skin with sterile water around the cord to prevent chemical burns from 2% chlorhexidine

Preparing Epinephrine with a rapid fill connector



Epinephrine 0.1 mg/mL
(1:10,000)

Rapid Fill Connector

1 mL syringe for UVC dose
3 mL syringe for ETT dose

Preparing UVC with stopcock

