

# SALINE LOCK

Presented By

## The Wayne County Medical Control Board



Health Emergency Medical Services Inc.  
(Wayne County Medical Control Authority)

Rob Bruley, FF/AEMT-I/C  
WCMCB Protocol Committee

# SALINE LOCK TRAINING

- This presentation is intended to be used in conjunction with training provided by an instructor or veteran ALS crew.
- It should not be used as the sole training program for new personnel or as a review for veteran personnel.

# THE SALINE LOCK

A.K.A.

- Heparin Lock
- Buffalo Cap

# The Big Questions

- WHY?

- WHEN?

# WHY?

- To save money!
- The Saline Lock provides an effective and cost efficient alternative to conventional IV therapy in patients requiring precautionary IV access.

- IV kits cost about \$7.50.
- Saline lock kits cost about \$3.50.
- Saline bags cost about \$1.00.

- Currently in use in all 5 counties of the region.
- They are here to stay so we might as well get used to it.

# WHEN?

- Indicated anytime an IV is started and would only run at a TKO rate.
- Indicated as the second and third IV lines in MI and CVA patients where some medications require multiple IV lines. (Currently TPA)
- Makes it easier for extrication from upper and lower floors as well as any cramped space that you are treating a patient in. (Less likely to catch on something.)

What are these kits supposed to contain?

# IV START KIT

- 1 0.9% NaCl -500ml bag
- 1 IV tubing set withclave Y site or pre-pierced reseal  
“Macro drip” (10-15gtts/ml)
- 1 Extension set with twinclave Y sites or pre-pierced reseal
- 1 14g x 2 inch IV catheter
- 1 16g x 1 inch IV catheter
- 1 18g x 1.00 inch to 1.25 inch IV catheter
- 1 20g x 1.00 inch to 1.25 inch IV catheter
- 1 22g x 1.00 inch to 1.25 inch IV catheter
- 1 24g x 1.00 inch to 1.25 inch IV catheter
- 4 Alcohol Wipes
- 1 Blue pad (wrap contents)
- 1 Tourniquet (tied around the wrap)
- 1 Exterior label

# SALINE LOCK KIT

- 1 30cc Sodium Chloride 0.9% (preservative free) Vial
- 2 18g x 1 inch to 1.25 inch IV catheter
- 2 20g x 1 inch to 1.25 inch IV catheter
- 4 Alcohol wipes
- 1 5ml Syringe
- 1 Needle 18g x 1.5 inch
- 1 Saline Lock
- 1 Blue Pad (wrap contents)
- 1 Tourniquet (tied around wrapped contents)
- 1 Exterior Label

# FLUID

- 2 0.9% NaCl 1000ml bags with exterior label

# WHAT THEY LOOK LIKE







**CLAVE CONNECTOR**



**CLC 2000**



# Clave Connections

(Used in Needle less systems such as ours)



Old Way  
Requires Needle

New Way with the  
Clave connector



Old Way



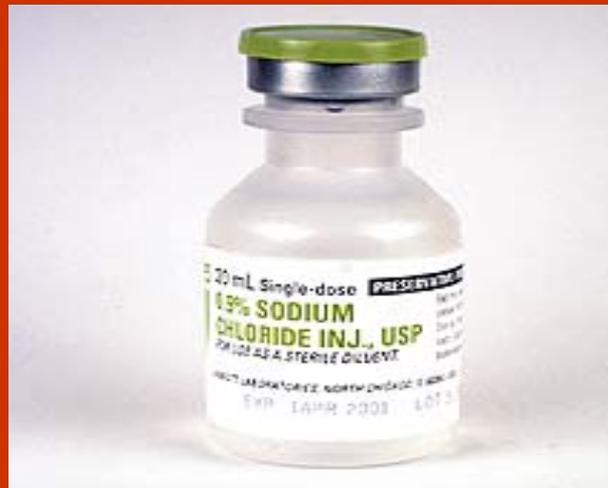
New Way with the  
Clave connector

# SALINE LOCK PROCEDURE

- Really no different than we are used to but without the hassle of the IV solution bag, the primary IV tubing or the extension tubing.
- Prepare the site in accordance with standard IV technique.

# THE PROCEDURE

- Prepare the 5ml syringe/NS flush prior to introducing the catheter.
  - Attach needle to syringe and draw up 5cc's N/S



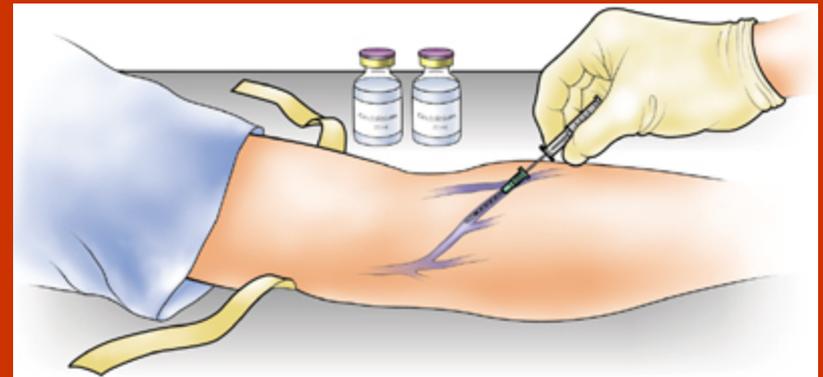
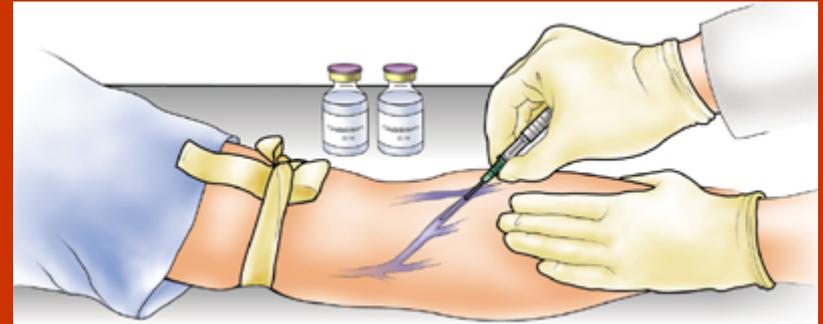
# THE PROCEDURE

- Remove needle and dispose.
- Attach syringe to the luer lock/clave connector on the lock device and flood the lock with saline.



# THE PROCEDURE

- Access the vein using standard IV technique

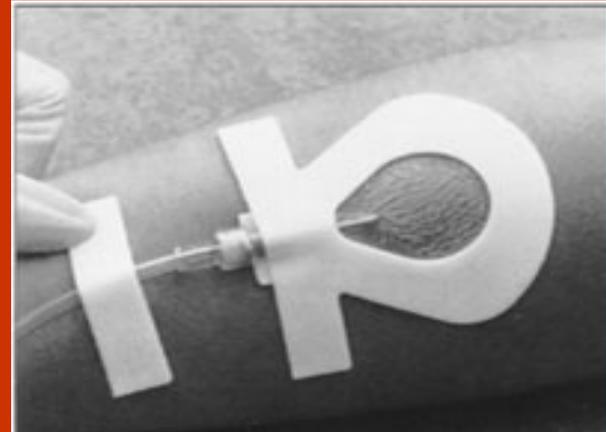


# THE PROCEDURE

- Attach the Saline Lock device to the catheter hub.
- Inject the remaining Saline and maintain pressure on the syringe plunger.
- Continue to maintain positive pressure on the syringe and disconnect from the lock device.

# THE PROCEDURE

- Watch for complications
- Secure using tape or other commercially sold device such as Venigaurd, Tegaderm, etc. Take care to leave the end of the lock device accessible should the need arise.



# What If ...

- The patient with a Saline Lock in place shows signs and symptoms that require more than two (2) medications or requires fluid boluses?
  - then you attach the solution bag with the IV primary and extension tubing directly to theclave connector on the lock device.

**SIMPLE**