Basics of Care and Maintenance: SAFE IV PATIENT CARE

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- 3M, Cook, Entrotech

Speaker Disclosure:
- Instructor - Nancy Moureau
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SPEAKER DISCLOSURE
OBJECTIVES

- Discuss safe practices that demonstrate aseptic technique with hands, gloves, skin, IV access
- Describe assessment procedure for insertion site, dressing and IV device function
- Explain basics of flushing to clear catheter and tubing of blood and infusates
- Establish policies to apply and teach safe IV practices

GOAL: SAFE PRACTICE

First, do no harm
Patients deserve care without fear of infection
Nurses have a duty to assess and safeguard patients

SAFETY FIRST

BASICS OF SAFE IV CARE

- Clean
- Assess
- Clear
CLEAN
Access Port

CLEAN HANDS

- Hands are always considered a source of bacterial transmission
- Hands are never considered sterile, despite hand washing
- Hands are washed:
  - When entering and leaving a room
  - Before and after all patient contact
  - Prior to any procedure

WHAT ARE THE 5 MOMENTS OF HAND HYGIENE/WASHING?

1. Wash hands when entering a room prior to applying gloves
2. When removing gloves
3. Prior to a clean/sterile procedure
4. Anytime you have touched the patient or contaminated table, bed, personal items
5. When leaving a patient room
**Gloves**

- Used for all patient contact and procedures
- Protect against transmission of organisms between clinician to patient
- Protect the clinician from any patient bodily fluids
- Bare hands are always a risk!!

**Clean Skin**

- 60% of all bacterial infections with intravenous devices come from the skin
- Every skin puncture is a potential for infection
- When skin contaminants get into bloodstream, they may cause infection

Skin is disinfected prior to any IV procedure

- Alcohol with Chlorhexidine is recommended
- Use frictional scrub. Clean for at least 15 seconds.
- Disinfection bathing wipes demonstrate reduced infection (CHG)
Intravenous access ports/needleless connectors are a source of bacterial contamination.

- Disinfect access port prior to EVERY access.
- Use alcoholic disinfecting agent.
- Disinfect top and sides thoroughly, scrubbing the access port for at least 15 seconds.
- Maximize contact time and maximize friction.

**CLEAN ACCESS DEVICE**

**TWO METHODS OF DISINFECTION**

- **Wipe Method**
  - Active scrubbing process.
  - Clinician uses alcohol prep pad to physically wipe the entire surface while getting into the threads of the connector.
TWO METHODS OF DISINFECTION

- Disinfecting Cap – alcohol containing
  - Passive disinfecting process used in between line accesses
  - Clinician places cleansing cap on hub where it remains for at least 1 minute and up to 7 days until access

CLEAN ACCESS PORT

- Whichever method you use:
  - Access ports must be disinfected prior to every access with compliance measures to ensure usage
  - CDC states contact time of 3-5 seconds may not be adequate for disinfection
  - Studies show alcohol wipes are not completely effective in eliminating bacteria even with 15 seconds

REVIEW-CLEAN

- Clean hands before and after patient contact
- Clean skin by washing, disinfecting prior to procedures, bathing daily
- Clean access port/needleless connectors by scrubbing before every access or use disinfection caps

References:
ASSESS
Site . Dressing . Function

ASSESSMENT PROCESS
- Site
- Infection
- Complication
- Dressing
  - Adherence
  - Clean and dry
- Catheter Function
  - Flush & Blood Return
  - Device necessity

DAILY SITE ASSESSMENT
- Safe Assessment includes:
  - Visual inspection of insertion site of peripheral or central catheter
  - Look for redness, swelling or any sign of complication
  - Palpate site through intact dressing, feeling for tenderness, oozing, ooze
  - Ask patient for their response to palpation or infusion

- Site
- Infection
- Complication
- Dressing
  - Adherence
  - Clean and dry
- Catheter Function
  - Flush & Blood Return
  - Device necessity
Dressing Assessment

- Dressing is assessed at least daily to ensure it is:
  - Intact
  - Should have full adherence on all sides
  - Replace if loose anywhere
  - Clean
  - Replace if blood or bodily fluids present

- Dry
  - Replace if wet or soiled in any way

- Within Date
  - Transparent dressings changed every 7 days regardless of condition; per INS Standards
  - Use Antimicrobial dressing for CVADs and high risk patients

Catheter Function Assessment

- Catheter function is assessed daily
  - Aspirate to check for blood return
  - Flush to check for flow and patency
  - Is the catheter still needed
  - Remove peripheral or central catheter when no longer being used
  - Reduce risk, remove catheter
CATHETER FUNCTION ASSESSMENT

- Treat any function problems immediately to avoid:
  - Complete loss of function
  - Delays in treatment
  - Potential infection

CATHETER DYSFUNCTION

- Inability to aspirate blood from central venous catheter and/or inability to flush can be resolved if identified early
- If caused by blood build-up within catheter, requires a thrombolytic to be instilled

REVIEW-ASSESSMENT

- Assess daily for:
  - Site appearance
    - Visual inspection
    - Palpation through intact dressing
  - Dressing
    - Clean
    - Dry
    - Intact/changed within 7 days
  - Catheter function
    - Aspirate blood
    - Flush
CLEAR CATHETER

Medications. Blood. Reduce Risk

CLEAR CATHETER FOR SAFETY

- Clean access ports until clean and clear
- Flush until inside of catheter is clear

FLUSHING

- Flush with 0.9% Normal Saline to:
  - Confirm patency with push pause pulsatile flush
  - Clear medications
  - Clear blood
• Flush until clear. Amount of flush to use is based on amount it takes to clear catheter.
• Blood in catheter increases risk of infection.
• Medications in catheter may hamper patency.

FLUSHING

• Reflux of blood from connection/disconnection may cause catheter occlusion.
• Prefilled syringes add safety – minimize contamination.
• Zero rebound, anti-reflux devices aid in reducing clotting.

FLUSHING TO REDUCE OCCLUSION

• Wipe connectors using a scrubbing motion until all blood residue is removed.
• Remove and replace needleless connectors if not clear.
• Clean and clean is perfect!

CLEANING CONNECTORS
\begin{itemize}
  \item Flush using normal saline until catheter is clear of all blood and medications
  \item Clean access port/needleless connectors until clear of all blood residue
  \item Safeguard your patients from bacterial growth
\end{itemize}

\textbf{CONCLUSION}

- The basics of safe IV care are easy!
- Clean...Assess...Clear
- Aseptic technique applies to skin/disinfection and every access to administer medications
- Promote patient safety with your actions

\textbf{CONCLUSION}

- Aseptic technique for:
  - Hands
  - Skin
  - Prepping accesses and cleaning access ports
  - Assessment for function, dressing and complications
  - Clear device with flushing to avoid infection or occlusion
Thank you to 3M!

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