

<b>Policy Title:</b> Management of (IV)Lines and Therapy		
<b>Department/Unite:</b> Infection Control Unit.	<b>Policy Number:</b> UOJ-MSA-IC-P/10	<b>Replaces No.:</b>
<b>Creation Date:</b> 10/12/2022	<b>Effective Date:</b>	<b>Review Date:</b>

Revision History			
Subject	Changes made	Done by	Revision date

1. **CONDITIONS:**

1.1 Nursing department

2. **PURPOSE:**

2.1 Provides intravenous (IV) therapy throughout the hospital in a consistent, standardized manner.

2.2 Ensure clinical competency of all nursing providing IV. Potentially prevents intra vascular device related infection.

3. **DEFINITIONS:**

3.1 Intravascular lines are an integral part of patient care. They offer a means of direct access to the patient's vascular system for administration of pharmaceutical agents or fluids that cannot be administered as effectively by other means.

4. **Related Documents:**

N/A

5. **POLICY:**

5.1 It is the University of Jeddah Medical Center policy to prevent and control Infection related to IV and to meet the standers of CDC /MOH.

6. **PROCEDURES:**

**6.1 Aseptic technique and Standard Precaution**

6.1.1 Sterile or aseptic technique refers to practices designed to render and maintain objects and area maximally free from microorganisms.

6.1.2 Sterile technique is indicated for the insertion of intravascular devices.

6.1.3 Perform hand hygiene with antimicrobial soap before and after palpating, inserting, replacing, or dressing any intravascular device. Using antiseptic agents to minimize the number of microorganisms on the skin of the patient at the time of the procedure.

6.1.4 Wear sterile gloves when inserting, changing dressings or manipulating tubing connection sites of a central vascular device.

6.1.5 Aseptic technique involves using maximum barriers, such as sterile gloves, gowns, masks, and drapes, to prevent transferring microorganisms from the environment to the patient during the insertion of central line.

6.1.6 Sterile gloves are not required for peripheral IV line insertion.

6.1.7 Wear surgical mask and goggles if potential exists for blood or body fluids to splash the face during dressing changes for example.

6.1.8 Do not manipulate or handle needles, and promptly dispose of used needles or sharp devices in hospital approved sharp containers kept near to the location of an intravascular line insertion.

## 6.2 Catheter Site Care:

6.2.1 Skin antisepsis:

6.2.1.1 Select an adequately large area of skin for preparation.

6.2.1.2 Prepare the skin with an appropriate antiseptic such as 70% alcohol, 10% povidone iodine, or 2% chlorhexidene gluconate or any other product as approved by Infection Prevention & Control for at least 30 seconds and allow to dry before catheter insertion.

6.2.1.3 Do not palpate the insertion site after the skin has been prepared with antiseptic unless the practitioner is employing maximum barrier precautions in a sterile field.

6.2.2 Catheter site dressings:

6.2.2.1 Cover the catheter site with sterile gauze or a transparent dressing.

6.2.2.2 Replace the dressing when the intravascular device is removed or replaced, or when the dressing becomes damp, loosened, or soiled. Do not change dressings at routinely scheduled intervals.

6.2.2.3 Avoid touch contamination of the catheter site when the dressing is replaced.

## 6.3 Replacement of Administration Sets and Intravenous Fluids:

6.3.1 Administration sets:

6.3.1.1 Replace IV tubing, including piggyback tubing and stopcocks, every 72-hours, unless clinically indicated such as the infusion of crystalloid solutions.

6.3.1.2 Replace tubing used to administer blood, blood products, lipid emulsions, dextrose/amino acid TPN solutions within 24 hours of initiating the infusion.

6.3.2 Parenteral fluids:

6.3.2.1 Complete infusions of total parenteral nutrition fluids (dextrose/amino

acid solutions or dextrose/amino acid solutions combined with lipid emulsions) within 24 hours of hanging the fluid.

6.3.2.2 Lipid emulsions alone should be completed within 12 hours of starting, or as instructed by pharmacy.

6.3.2.3 Change crystalloid solutions every 72 hours.

#### 6.4 Intravenous Injection Ports:

6.4.1 Clean injection ports with 70% alcohol or 10% povidone iodine before accessing the system.

#### 6.5 Preparation and Quality Control of Intravenous Admixtures:

6.5.1 Admix all parenteral fluids in the Pharmacy only.

6.5.2 Check all containers of parenteral fluid for visible turbidity, leaks, cracks, particulate matter, and manufacturer's expiry date before use.

6.5.3 Use single dose vials for parenteral additives or medications whenever possible.

6.5.4 If multi dose vials are used.

6.5.5 Date and time the multi dose vials once opened.

6.5.6 Refrigerate after multi dose vial is opened, if recommended by the manufacturer.

6.5.7 Cleanse rubber diaphragm of multi dose vials with alcohol before inserting a device into the vial.

6.5.8 Use a sterile device each time a multi dose vial is accessed and avoid touch contamination of the device prior to penetrating the rubber diaphragm.

6.5.9 Discard multi dose vials when suspected or visible contamination occurs, when the manufacturer's expiry date is reached, or when nursing policy expiry date is reached.

#### 6.6 Documentation:

6.6.1 Document in the patient's records the following information for all:

6.6.1.1 procedures related to IV therapy.

6.6.1.2 Date and time of insertion.

6.6.1.3 Type of device used and site of insertion.

6.6.1.4 Type of fluid administered.

6.6.1.5 Name(s) of person(s) who inserted the device.

6.6.1.6 Date and time of device termination or guide wire exchange.

**6.7 Microbial culturing for suspected infections:**

6.7.1 Catheter tip cultures:

6.7.1.1 Catheter tip culturing should be done only if catheter-related infection is suspected. It is not a routine clinical procedure.

6.7.1.2 Remove the cannula using aseptic technique to avoid contamination.

6.7.1.3 Using sterile scissors, cut the catheter approximately 1 cm from the tip and place the segment in a sterile container.

6.7.1.4 Send the catheter tip segment to the microbiology lab for semi quantitative culture as soon as possible.

**7. RESPONSIBILITIES:** 7.1 Accountable to the Infection Prevention Control Practitioner/Committee.

**8. Appendix:** N/A

**9. REFERRANCES:** 9.1 Ministry of Health Manual for Infection Control

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