

NI Fundamentals of Nursing Course

Clinical Skills Procedure/Rubric

Nurses International

Oncology Clinical Skills

Name of the Procedure/Rubric/Rationale: IV Administration of Anti-Cancer Drug

Prerequisite Clinical Skills: IV Cannulation, Priming IV line

Step	Procedure	Yes	No	Remarks
1.	Check the doctor's order for anti-cancer drugs prescribed.			
2.	Perform hand hygiene.			
3.	<u>Collect equipments :</u> First- Clean trolley with approved cleaning agent Second- Collect following supplies on the trolley ☐ chemotherapy prescription and treatment protocol ☐ personal protective equipment (PPE) ☐ spill kit ☐ alcohol swabs ☐ plastic-backed absorbent sheet ☐ gauze squares (non-sterile) ☐ drug(s) to be administered (in leak proof, sealable bags) ● Inspect drug container for - Leakage - Drug cloudiness - particulate matter - Discoloration - Expiration date Contact pharmacy for further instruction if presence of leakage, drug cloudiness, particulate matter, discoloration, or expiration date. ☐ syringes as required to administer pre-medications and for flushing ☐ 2 x 10 mL sterile sodium chloride 0.9% ampoules ☐ intravenous lines with Y line or closed system and needleless luer lock connections(s) ☐ compatible fluid (e.g. sodium chloride 0.9%) to prime IV line(s) ☐ hazardous drug waste bags and bins.			

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4.	Greet the patient and explain what, why, and how of the procedure. Obtain verbal consent and written consent as required.			
5.	Ensure privacy by pulling curtains, closing doors as per patient's comfort.			
6.	Verify the patient has received education on : • Antineoplastic drugs and how they work • Treatment protocol including drug names, number of cycles and days of treatment • Venous access required e.g. IVC, PICC, Port, CVC, apheresis catheter (circle) • Side effects of treatment e.g. immediate, early, late and delayed • Self care activities e.g. diet, hydration, mouth care, monitoring temperature • Situations that require urgent treatment e.g. febrile neutropenia, uncontrolled vomiting or diarrhoea, bleeding • Medical review, when and how often • Supportive care services			
Assess Patient for Side-effects and Previous Adverse Events				
7.	Laboratory parameters checked as per protocol requirements.			
8.	Perform hand hygiene.			
9.	Raise the level of bed to working height and lower the side rail on your side.			
10.	Check the patient's vital signs.			
11.	Check for allergies.			
12.	Perform psychosocial assessment.			
13.	Assess patient for treatment experiences in the past, and during current administration: Anemia, neutropenia, thrombocytopenia, nausea, vomiting, oral mucositis, diarrhoea, constipation, fatigue, peripheral neuropathy, skin toxicity, others.			
Preparation of IV Access				
14.	Position the patient comfortably, raise the level of the bed to comfortable height. Lower the side rail if necessary.			
15.	Perform hand hygiene and don sterile gloves.			

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16.	Prime the IV lines.			
17.	a. For vesicant drugs, get new IV access. <i>Increased risk of extravasation of the drug from old site.</i> - Select appropriate site, preferably large vein in the middle of the forearm - Insert new appropriate sized cannula - Check IV cannula for blood return and flush with 5-10 ml sodium chloride 0.9% <i>To confirm patency</i> - Stabilize and secure IV cannula with transparent dressing <i>To allow the site to be visualized</i> b. For non-vesicant drugs, IV access in situ for not more than 48 hours can be used if blood return is present and there is absence of redness/swelling/extravasation in the site.			
Administration of Anti-Cancer Drug				
18.	Connect IV lines Check that the IV infusion flows freely.			
19.	Set up equipment on IV trolley including: a. plastic backed absorbent sheet b. drugs to be administered including anti-emetics and pre meds c. gauze squares and alcohol swabs			
20.	Put on PPE, minimum of double gloves and gown.			
21.	Check drugs and fluids with another appropriately trained health professional against prescription and treatment protocol. Check for : ☐ Right Patient (Two identifier- name and date of birth) ☐ Right Drug (Name and expiration date) ☐ Right Dose ☐ Right Route ☐ Right Time ☐ Correct rate ☐ Signed consent form Both providers must sign as a checker.			

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22.	Use Bar code technology if available as per facility policy.			
23.	Clean the luer lock/connection ports with two alcohol swab twice for 30 secs and let them air dry before administering medication. <i>Disinfects to prevent transmission of infection.</i>			
24.	Administer fluids and premedications as per protocol.			
25.	Administer anti-cancer drug. vesicant drugs DO NOT use a pump to administer vesicants - via a new IVC whenever possible - via a mini bag OR by IV bolus via a side port of a freely flowing IV infusion check IVC for blood return regularly throughout the infusion (ONS1 recommend checking for blood return every 2-5 mL of administration) drugs via bolus injection - do not expel air from syringe - connect syringe, ensuring luer lock connections are secure - administer via a side port of a freely flowing IV infusion - use gauze to hold beneath the side port and syringe connection drugs via IV infusion - clamp IV line - when spiking IV bag, place bag on clean flat surface at waist height - use gauze to hold beneath the bag connection site and connect IV bag appropriately (if not using a closed system) - on completion of chemotherapy do not disconnect IV bag. <i>To reduce biohazard from cytotoxic drugs.</i> Observe the rate of administration of the drug. Check the rate with another nurse.			

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26.	Monitor patient for signs and symptoms of extravasation, flare reactions, hypersensitivity reactions, and any other patient responses: a. If extravasation is suspected, stop the infusion. i. Watch for signs and symptoms of drug extravasation: stinging or burning pain, edema, redness, itching at insertion site, no blood return, leakage of medication at insertion site, numbness. ii. If the above sign/symptoms of extravasation are present, Stop the infusion and disconnect the infusion. iii. Aspirate as much of the drug from the line as possible. iv. Notify the physician and administer drug specific antidotes. v. Manage extravasation as per protocol. vi. escalate appropriately as per institutional guidelines. b. If hypersensitivity or infusion related reaction is suspected, stop the infusion i. refer to protocol for management ii. escalate appropriately as per institutional guidelines.			
27.	Flush the line on completion via a separate/side line, do not disconnect the bag from the line.			
28.	Assist the patient to a comfortable position, raise the side rail and lower the bed to a safe height.			
29.	Dispose of hazardous waste as per institutional guidelines.			
30.	Remove PPE (remove contaminated PPE including gloves prior to programming infusion pump or handling any other devices) and discard as per institutional protocol.			
31.	Perform hand hygiene.			
32.	Document the procedure and patient's response in the medical record.			

Reference:

Cancer Institute of New South Wales, eviQ, April 2019, *Clinical procedure- administration of anti-cancer drugs- intravenous cannula (IVC)*. New South Wales Government. Accessed from:

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