សាកលវិទ្យាល័យ ពុទ្ធិសាស្ត្រ
UNIVERSITY OF PUTHISASTRA
Honor Self Respect Others Develop Society

ការប្តូរថ្នាក់សេរ៉ូម
Changing Intravenous Solutions

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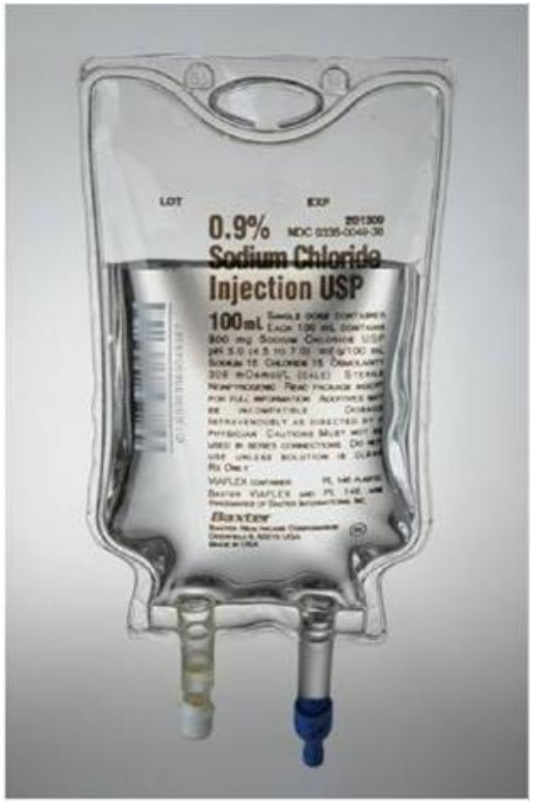
១. ទស្សនៈទូទៅនៃការប្តូរថ្នាក់សេរ៉ូម / Overview of changing intravenous solutions

អ្នកជំងឺកំពុងទទួលការព្យាបាលតាមសរសៃរឈាម(IV) រយៈពេលយូរ ត្រូវការ ប្តូរល្បាយសេរ៉ូមឱ្យបានទៀងពេល។ ថ្នាក់សេរ៉ូម រួចមាន ថ្នាក់ជ័រ(plastic bags), ថ្នាក់កែវ (glass bottles)។ គិលានុ. អាចប្តូរថ្នាក់សេរ៉ូម នៅពេលមានវេជ្ជបញ្ជាឱ្យប្តូរល្បាយសូលុយស្យុងថ្មី ឬនៅពេលដល់ម៉ោងកំណត់ ដើម្បីប្តូរថ្នាក់ថ្មីបន្ត ជៀសវាងហួសម៉ោងនឹងចូលខ្យល់។ វាទៅជាការសម្រួលមួយចំពោះការព្យាបាលគ្លីនិក ក្នុងការប្តូរល្បាយសូលុយស្យុង អាស្រ័យលើ សារធាតុរាវនិងតុល្យភាព electrolyte របស់អ្នកជំងឺ, ការឆ្លើយតបនឹងការព្យាបាល (e.g., therapeutic drug monitoring), នឹងគោលបំណងនៃការព្យាបាល។ The Infusion Nurses Society (INS) recommends ការប្តូរថ្នាក់សេរ៉ូម នៅក្នុង២៤ម៉ោង បន្ទាប់ពីបន្ថែមថ្នាំចូល ឬប្តូរសំភារៈដាក់សេរ៉ូមទាំងអស់។ ការប្រើប្រាស់ឧបករណ៍បញ្ចូលសារធាតុរាវបន្តទៀតអាចលើសពី២៤ម៉ោងបាន ប្រសិនបើគិលានុ. អនុវត្តដោយ aseptic technique។

Equipment

- IV solution as ordered by health care provider



២. ការប៉ាន់ប្រមាណការថែទាំ / Assessment

1) Review accuracy and completeness of health care provider's order in patient's medical record for patient name and correct solution: type, volume, additive, rate, and duration of IV therapy
2) Note date and time when IV tubing and solution were last changed.
3) Check the IV solution for integrity including, but not limited to, discoloration, cloudiness, leakage, expiration date.
4) Determine patient's understanding of need for continued IV therapy
5) Assess patency of current VAD site, observing for any signs or symptoms of complications such as redness, swelling, discomfort.
6) Assess IV tubing for puncture, contamination, or occlusions
7) Check laboratory data, such as potassium level.

៣. រោគវិនិច្ឆ័យថែទាំ / Nursing Diagnosis

- Deficient fluid volume
- Deficient knowledge regarding IV infusion
- Risk for injury
- Risk for injury

Related factors are individualized based on patient's condition or needs

៤. ផែនការថែទាំ / Nursing Planning

Expected outcomes following completion of procedure:

- IV solution is correct.
- VAD remains patent
- Patient and family caregiver can explain purpose of IV solution change.

៥. ការអនុវត្តន៍ថែទាំ / Implementation

1. Collect equipment. Have next solution prepared at least 1 hour before needed. If solution is prepared in pharmacy, ensure that it has been delivered to patient care unit. Allow solution to warm to room temperature if it has been refrigerated. Check that solution is correct and properly labeled. Check solution expiration date.
2. Identify patient (i.e., name and birthday)
3. Change solution when fluid remains only in neck of container (about 50mL) or when new type of solution has been ordered.
4. Prepare patient and family caregiver by explaining procedure, its purpose, and what is expected of patient.
5. Perform hand hygiene

6. Prepare new solution for changing. If using plastic bag, hang on IV pole and remove protective cover from IV tubing port. If using glass bottle, remove metal and rubber disks.
7. Close roller clamp on existing solution to step flow rate. Remove tubing from EID (if used). Then remove old IV fluid container from IV pole. Hold container with tubing port pointing upward.
8. Quickly remove spike from old solution container and, without touching tip, insert spike into new container (Note: if spike is contaminated, you will need a new IV tubing set.)

9. Hang new container of solution on IV pole.
10. Check for air in tubing. If air bubble have formed, remove them by closing roller clamp, stretching tubing downward, and tapping tubing with finger (bubble rise in fluid to drip chamber).
11. Make sure drip chamber is one-third to one-half full. If drip chamber is too full, level can be decreased by removing bag from IV pole, pinching off tubing below drip chamber, inverting container, squeezing drip chamber, releasing and turning solution container upright, and releasing pinch on tubing.
12. Regulate flow rate by using roller clamp on tubing or programming EID.
13. Place time label on side of container and label with time hung, time of completion, and appropriate intervals. If using plastic bags, mark only on label and not container.

៦. ការវាយតំលៃថែទាំ / Evaluation

1) Observe functioning, intactness, and patency of IV system and flow rate
2) Observe patient for signs of fluid volume deficit (FVD) of fluid volume excess (FVE) to determine response to IV therapy.
3) Assess patient for signs and symptoms of IV-related complications. Palpate skin for temperature, edema, or tenderness.
4) Unexpected Outcomes
5) Flow rate is incorrect; patient receives too little or too much fluid.

៧. ការកត់ត្រា និង រាយការណ៍ / Recording & Reporting

- Record amount and type of solution infused, amount and type of solution started, and flow rate according to agency policy.
- Record solution and tubing change on patient's record. Use parenteral (IV) therapy flow sheet, if available.

Reference

PERRY&POTTER (2008). Clinical Nursing Skill and Techniques, 8th Edition. Elsevier MOSBY, St. Louis, Missouri. Page 713-716.