Nursing Service Policy and Procedure SUBJECT: **SPECIMEN, URINE: URINARY DIVERSION** EFFECTIVE DATE: 9/10

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PURPOSE: The introduction of a drainage tube through the urinary diversion ostomy to obtain a urine specimen

Pathophysiology / EBP: The ileal conduit is designed to collect urine from the kidneys when a patient's own bladder can not be used for that purpose. The urine drains from the kidneys through the ureters into the ileal pouch. It is collected in an appliance (bag) which is attached to the skin. The bag is emptied a number of times a day or as needed. The skin, stoma, bag and urine in the bag are routinely contaminated/colonized with bacteria of many different types. Bacteria can grow very fast in urine (E. coli has a doubling time of 20 minutes) and this means that bacteria present low amounts which would not ordinarily be considered significant enough for microbiologic work up can within an hour or two grow up to significant numbers (10⁴ to 10⁵) which would merit work up and reporting. Therefore suboptimal collection and transport of urine from ileal conduits can lead to false positive UA and culture results, a misdiagnosis of urinary tract infection and unnecessary treatment with antibiotics.



MAY BE IMPLEMENTED BY: RN

POLICY:

1. If allergic to latex, call 4-4111 to speak to CSR to get a latex free catheter.

2. If patient is allergic to povidone - iodine, use Dynahex Soap.

EQUIPMENT/SUPPLIES:

1. Personal protective equipment (PPE) as appropriate.

2. Red rubber straight cath kit **<u>without</u>** pre-attached bag.

PREPARATION AND INSTRUCTION:

- 1. Link to Pathology site
- 2. Use Standard Precautions.
- 3. Explain procedure to patient and/or family.

PROCEDURE:

- 1. Gather equipment.
- 2. Perform hand hygiene.
- 3. Don non-sterile gloves
- 4. If possible, attempt to obtain specimen when patient is due to change pouch if using one-piece system.
- 5. If patient has a two-piece system, remove pouch but leave barrier attached to skin

- 6. Open sterile package and use the inside of package as your sterile field.
- 7. Don sterile gloves.
- 8. Open lubricant and lubricate catheter.
- 9. Open povidone iodine packet and pour over cotton swabs; if patient allergic to povidone iodine, use Dynahex soap (obtain from Central Supply).
- 10. Cleanse surface of stoma with antiseptic swabs using circular motion from center outward. Using a new swab each time, repeat twice. Wipe off excess antiseptic with dry sterile cotton ball.
- 11. Pick up the lubricated catheter with dominant hand and insert into stoma. Do not force catheter, redirect course as needed. Use gentle but firm pressure similar to regular catheterization of urethra. Insert to depth beyond the level of fascia. Have patient cough or turn slightly to facilitate flow of urine.
- 12. Allow for the first 5 ml of urine to flow into basin for waste. Collect a sample from the mid or later flow of urine by placing the sterile specimen cup under the stream of flowing urine. May take several minutes to get adequate amount of urine.
- 13. Set filled specimen cup aside, twist cover tightly to secure.
- 14. Empty rest of urine into waste basin and remove catheter. Place abosorbant pad over stoma.
- 15. Re-apply new pouch or reattach pouch if patient uses a two-piece system.
- 16. Label specimen (patient's name, MRN, DOB, Date/time specimen obtained, method of specimen collection).
- 17. Place specimen in a double biohazard bag
- 18. Clean hands.
- 19. Send double bagged specimen to the lab with requisition form within 15 minutes of collecting.

For outpatient clinics:

- 1. If UA is needed and not performed on site, separate urine into two separate containers; one with preservative and one without preservative. Mark specimens accordingly.
- 2. Transport preservative free specimen at 4° C.

DOCUMENTATION:

- 1. Document specimen obtained in Cerner via PAL or the "Urine Specimen Collection" AdHoc form.
- 2. Patient's tolerance of procedure and signs/symptoms of urinary problems.

Reference:

Dayan, P., Chamberlain, J., Boenning, D., Adirim, T., Schor, J., Klein, B., (2000). A comparison of the initial to the later stream urine in children catheterized to evaluate for a urinary tract infection. *Pediatric Emergency Care*, 16(2): 88-90.

Cornish, N., Washington, J., (1996). Laboratory diagnosis of UTI. *Hospital Medicine*, June supplement: 32-36.

Perry, A., and Potter, P., (2010). Clinical Nursing Skills and Techniques, 7th ed., Philadelphia, PA., Mosby Inc.

Nebraska Methodist Pathology http://www.thepathologycenter.org/Education.asp