	Policies and Procedures RNSP: RN Procedure Title: BACILLUS CALMETTE-GUERIN (BCG) INSTILLATION ID Number: 1006
Authorization: X SHR Regional Nursing Practice Committee [X] SHR Urology Committee [X] Manager of Nursing, SCH Clinical Treatment Centre (X) Manager of Nursing, SPH Urology Centre of Care	Source: Nursing Date Revised: January 2017 Date Effective: November 2001 Scope: SCH Clinical Treatment Center SPH: Urology Center of Care

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DEFINITIONS

Bacillus Calmette-Gurein (BCG) instillation is an immunotherapy for superficial bladder cancer. BCG is a viable attenuated strain of the mycobacterium bovis. When instilled into the urinary bladder, it promotes a local inflammatory response which seems to destroy cancerous cells.

ROLES

Registered Nurses (RNs): RNs identified by their manager in targeted practice settings will be certified in this RN Specialty Practice (RN Procedure): Bacillus Calmette-Guerin (BCG) Instillation.

1. PURPOSE:

1.1 To safely administer BCG

2. POLICY:

2.1 Check physician's order.

2.2 The RN certified in this RNSP will have completed the following:

- Attend an educational session on instilling BCG
- Complete the learning package and quiz and return to CNE
- Complete skills check list with a certified RN during the first instillation of BCG to insure safety checks are followed appropriately.
- Repeat quiz and demonstration annually to maintain certification.

2.3 Registered Nurses may use Lidocaine Jelly 2% to minimize discomfort when catheterizing the patient as ordered.

2.4 Sterile technique will be followed.

2.5 BCG will be administered to male and female patients.

3. PROCEDURE:

3.1 Check the physicians order for BCG instillation and the use of Lidocaine Jelly 2%.

3.2 Assess the patient. Take vital signs (T-P-R and BP). Contact the physician before proceeding with the treatment if the patient reports:

- Dysuria or urinary frequency
- Continued bleeding when voiding
- Temp > 38, cough, severe fatigue, nausea and vomiting, headache, muscle and joint aches.
- Incontinence
- Uncertainty or lack of knowledge about the treatment.
- Allergy or sensitivity to local anesthetics.

3.3 Review patient teaching handout with patient and family if present. Appendix A

3.4 Supplies required:

- Sterile gloves
- #12 or #14 straight silicone catheter for females
- #12 or #14 Tieman catheter for males
- Catheterization tray
- BCG and BCG Reconstitution Kit (from Pharmacy)
- 60 ml Luer Lock Syringe
- Sterile N/S 50 ml
- Incontinent Pad
- Biohazard Waste Container and yellow hazardous waste bag.
- Lidocaine Jelly 2%
- Clean Gloves
- Alcohol Hand sanitizer
- Gown
- Mask with splash guard

3.5 Preparation/Instillation of the BCG:

3.5.1 Perform hand hygiene and don PPE gown, mask & shield and clean gloves.

3.5.1 Using the 60-ml syringe, withdraw 50 ml N/S from the N/S container.

3.5.2 Using the BCG Reconstitution Kit, turn the stopcock to close the catheter port.

3.5.3 Attach the 60 ml syringe to the luer lock port.

3.5.4 Spike the BCG vial on to the remaining port on the transfer set.

3.5.5 Inject 1 ml of Normal Saline from the syringe into the BCG vial.

3.5.6 Swirl gently for a few minutes to mix completely.

- 3.5.7 Withdraw BCG contents into the syringe.
- 3.5.8 Rinse the vial by injecting another ml from the syringe, and withdrawing the contents into the syringe.
- 3.5.9 Remove gloves and perform hand hygiene.
- 3.6 Catheterization of the patient:
 - 3.5.10 Follow Catheterization procedure in *Clinical Nursing Skills & Techniques* pp 812-823.
 - 3.5.11 Apply Lidocaine Jelly 2% or water based lubricant to the urinary meatus and to the tip of the catheter to minimize trauma to the urethra and to increase comfort of the patient.
 - 3.5.12 Catheterize the patient using the appropriate catheter #12 or #14 straight silicone catheter for women or #12 or #14 Tieman catheter for men.
 - 3.5.13 If catheterization is traumatic, or there is fresh blood in the urine, withhold the treatment and contact the physician.
 - 3.5.14 Drain the bladder, applying gentle pressure to the lower abdomen to facilitate complete emptying of the bladder.
 - 3.5.15 Place catheter end in the sterile graduated plastic basin as provided with the catheterization tray.
- 3.7 Attach transfer set to the patient catheter; adjust the stopcock to close the port to the BCG vial.
 - 3.7.1 Using gravity or very gentle pressure, inject the syringe contents into the patient bladder.
 - 3.7.2 Slowly remove the catheter, being careful to prevent BCG contamination.
- 3.8 Dispose of all BCG contaminated equipment in the following the Hazardous Drugs – (non-chemotherapy) administration and precautions ID # 1044 and standard work. (See Appendix B).
- 3.9 Provide patient with information handout and review instructions with the patient. (see Appendix A)
- 3.10 Discharge the patient as per physician's order.
- 3.11 Document on patient chart:
 - Assessment of the patient
 - Catheterization of the patient
 - BCG instillation
 - Treatment number – Example 2/6
 - Patient response
 - Lot number and expiry date of BCG

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SASKATOON HEALTH REGION

Saskatoon, Saskatchewan

BCG Treatment for Bladder Cancer

SCH SPH Other _____
 Clinical Treatment Center Urology Centre of Care

BCG is a vaccine that is used to treat bladder cancer by increasing your body's natural defenses. BCG is a weakened bacterium similar to TB (tuberculosis). It is a cloudy liquid that is given through a small catheter into your bladder. The treatment is usually repeated weekly for a total of 6 weeks for the first course of treatment.

Before your treatment:

- DO NOT DRINK LIQUIDS for 2 hours before your treatment. Do not drink caffeine for 6 hours before your treatment and not until 2 hours after the treatment. Wait until 2 hours after your treatment to take your diuretics.

Your treatment:

Your nurse will put a catheter into your bladder and empty any urine. The BCG is then inserted into your bladder via the catheter. The catheter is then removed. For your first treatment you will be asked to stay in the unit for 1-2 hours, until you have emptied your bladder. After the first visit, you may go home and do your turns at home.

DISCHARGE INSTRUCTIONS

Introduction: The following instructions are meant to provide you with guidelines and prepare you for discharge home. If you have any questions please speak to your nurse or doctor.

FOLLOW-UP APPOINTMENTS:

You will have a series of 6 or 3 treatments. Check before leaving the unit that your next appointment is booked. If you need to cancel a treatment, please call the unit at SCH 655-0844 or SPH 655-5420.

TREATMENTS:

- Tell doctors or dentists that you are being treated with BCG before you receive any treatment from them.
- A flu-like illness may occur a few hours after your treatment and may last 1-3 days. You may have headache, fever, muscle and joint aches. This is a normal and expected reaction.
- BCG may irritate your bladder. You may notice frequent or painful urination.
- You may also notice a small amount of blood in the urine.

Patient signature: _____

Date: _____

Witness signature: _____

Date: _____

ACTIVITY AND EXERCISE:

- You will be asked to hold the BCG for 2 hours in your bladder. For the first hour spend 15 minutes lying on your back, right side, stomach and left side. This makes sure the BCG completely covers your bladder.
- Sexual activity may be resumed after 48 hours. Use a condom for one week following treatment.
- The effect of BCG on sperm, eggs or baby during pregnancy is not known. It is best to use a reliable birth control while being treated with BCG. Tell your doctor right away if you or your partner become pregnant. **Do not breast feed** when you are getting BCG treatments.
- Feeling tired and achy is normal for 1-2 days after your treatment. Rest and take it easy.

HYGIENE:

- After 2 hours you may urinate **sitting down**. (You should sit to urinate for the first 6 hours after your treatment to prevent splashing of the urine). After urinating, pour 1 cup of household bleach into the toilet and let it stand for 15 minutes before flushing. Flush the toilet twice. Continue to do this for 6 hours after your treatment.
- Wash any urine splashes with soap and water. Wash your hands well with soap and water. Wash clothes, bedding and any articles that have touched your urine in hot, soapy water separately from any other laundry. If possible add bleach.

MEDICATIONS:

- You may take acetaminophen (Tylenol) 325 mg. 1-2 tablets every 4 hours if needed for pain and fever.
- If you have any questions or concerns about your medications, please contact your doctor.

DIET:

- Drink normal amounts of water after you have emptied your bladder. Empty your bladder frequently.

ADDITIONAL NEEDS:

Contact your physician immediately or go to emergency if you develop:


- Signs of an allergic reaction soon after a treatment including difficulty breathing, shortness of breath, wheezing, rash over the whole body or swelling in the face.
- Signs of a BCG infection such as a cough, fever greater than 38 degrees C severe pain or a large amount of blood in the urine.

See your doctor if you have:

- Nausea and vomiting, headache, severe fatigue, fever, muscle and joint aches that do not go away with acetaminophen or that last longer than 2-3 days.

If you have any questions or concerns, please contact your doctor.

Appendix B

 <p>WORK STANDARD</p>	Name of Activity: Disposing BCG products Role performing Activity: CTC Staff		
	Location: SCH		Department: CTC/Housekeeping
	Document Owner: Rosine Garabedian, Manager, Housekeeping		Region/Organization where this Work Standard originated: Saskatoon Health Region
	Date Prepared: July 5, 2016	Last Revision:	Date Approved:

Work Standard Summary:

To ensure the safety of CTC staff and the proper disposal of products used to administer BCG vaccine, the following steps will be used by CTC staff.

Essential Tasks:	
1.	CTC staff person will bring a small yellow biomedical bag which has been draped over the sides of a hard-sided container-with-a-handle to the patient bedside, and place on the floor.
2.	CTC staff will administer BCG vaccine as usual.
3.	CTC staff will collect all waste from the procedure, including urine basin, soaker pads, tubing, etc., into the yellow bag. Any items that are not contaminated with BCG (such as face shield) may go in regular garbage, however if there is suspicion of contamination, place the item in the yellow bag.
4.	CTC staff will express air from the bag in a fashion that does not put the individual at risk of spray or exposure to BCG.
5.	CTC staff will zip-tie the bag at the patient bedside and carry the hard-sided container with the tied bag to the service room.
6.	CTC staff will place the container on the floor and deposit the bag into the blue Rubbermaid bin which is not lined with a yellow bag. (The lined Rubbermaid bin is intended for "loose" biomedical waste from other procedures.)
7.	CTC staff will wipe down the handle and outsides of the hard-sided container with a percept wipe and place the container where it can be used for the next BCG procedure.

Supplies:

- Hard-sided container (used only as a form to hold plastic bag)
- Small yellow biomedical waste bag
- Zip tie
- Accel wipe