

Bacillus Calmette-Guerin (BCG)

SUNA Postoperative Care Task Force

Overview

Bacillus Calmette-Guerin (BCG) is a weakened bacteria first created as a vaccine for tuberculosis. Although BCG is not useful as a vaccine, it can stimulate your immune system and help your body fight your bladder cancer. BCG may be used to decrease the chance of having another bladder tumor, prevent the cancer from entering the muscle wall of the bladder, and cure a type of cancer: carcinoma-in-situ.

The standard initial course is one treatment per week for six weeks. The dosage and duration of your treatment may be different as determined by your urologist. BCG must be given carefully in a doctor's office or hospital. BCG is a weakened (not dead) bacteria. It is important that we minimize any exposure for others who are not receiving this treatment. A bladder catheter is placed each week to put the BCG in the bladder. You will hold the BCG in your bladder for 2 hours. You must be very careful about where, when, and how you empty your bladder after getting the BCG (instructions below). You will see your urologist 4 to 12 weeks after getting the BCG to determine if any other treatment is necessary.

Indications

Bacillus Calmette-Guerin (BCG) is a standard treatment option for non-muscle invasive bladder cancer.

What to Expect Before the Procedure

At each visit for the BCG treatment, you will be asked to leave a urine sample. If you have a bladder infection or a large amount of blood in the urine, you should not receive BCG that day.

A catheter will then be placed into your bladder to empty any residual urine and instill the BCG. The person giving you the BCG must be very careful not to spill any BCG. Please work with the nursing staff to ensure proper delivery of the BCG.

You may be required to stay in the clinic after the first treatment to see how the BCG will affect you. As long as you are doing well, you may be able to leave immediately after subsequent treatments.

The BCG should remain in your bladder for 2 hours for the best results. If you must urinate before 2 hours, please let the clinic know at your next visit as to how long you were able to hold the BCG.

What to Expect After the Procedure

Urinate after 2 hours of holding the BCG. Men should SIT on the toilet to urinate so the BCG does not splash. Completely empty your bladder. **DO NOT FLUSH THE TOILET AT THIS POINT.**

Wash your hands and genital area with soap and water after urinating.

After urinating and washing your skin, pour 2 cups of bleach (Clorox or equivalent) into the toilet. Let the bleach and BCG mixture stay in the toilet for 15 to 20 minutes before flushing. Flush the toilet. (Remember: BCG is a weakened [not dead] bacteria. It is important to kill the bacteria so it won't affect others.)

Use bleach each time you urinate for the next 6 hours. You should plan to stay home and use the same toilet for those 6 hours. Drink at least 8 oz. of liquid every hour for those 6 hours to help flush the bladder well.

Do not have sexual intercourse for at least 48 hours after each BCG instillation. Men need to wear a condom for the entire course of the 6-week treatment and for 6 additional weeks after treatment has ended. Women should avoid vaginal contact for one week following each treatment and for 6 additional weeks after treatment has ended. (Remember: BCG is a weakened [not dead] bacteria that could affect others.)

Acknowledgment

We would like to especially thank the following SUNA members for their valuable contributions to these special focus issues. They either acted as a peer reviewer, author of the educational handouts, or both.

Michele Boyd, MSN, RN, NPD-BC

Lynn Huck, ANP

Christopher T. Tucci, MS, RN, BC, CURN, NE-BC, FAUNA

Gwendolyn Hooper, PhD, APRN, CUNP

Anthony R. Lutz, MSN, NP-C, CUNP

Margaret (Amy) Hull, DNP WHNP-BC

Annemarie Dowling-Castronovo, PhD, RN, GNP-BC, ACHPN

Lais Heideman, RN, CURN

Susanne A. Quallich, PhD, ANP-BC, NP-C, CUNP, FAUNA, FAANP

Michelle J. Lajiness, FNP-BC, FAUNA

Marc M. Crisenbery, MSN, APRN, FNP-BC

We hope you and all your family members may benefit from these handouts.

Complications and Call the Clinic if You Experience:

- **Burning and frequency with urination.** You should increase your fluid intake. Avoid caffeine and alcohol. Burning and frequency may get worse during the treatment. Sometimes medications can help with these symptoms.
- **Low-grade fevers (up to 100 degrees F), fatigue, aching, and flu-like symptoms.** Tylenol will help to relieve these symptoms within 48 hours. Drink as much fluid as you can to keep the urine clear. You should take it easy and try to rest. These symptoms occur because the BCG stimulates your immune system.
- **Blood in the urine.** The BCG causes some irritation to the bladder and may cause bleeding that can turn your urine red. Drink as much fluid as you can to keep your urine clear and to prevent blood clots from forming in the bladder. Bleeding most often resolves spontaneously.

If you have a fever over 101 degrees F, chills, rash, prolonged cough, or specific joint pain, or if any of the above symptoms last longer than 48 hours, you need to contact the clinic as soon as possible. More severe symptoms often indicate a serious reaction to the BCG and may require medication to treat.

**If you are unable to reach the clinic and are in need of urgent assistance, please proceed to the nearest Emergency Department.

Resources

- Chang, S.S. (2020). Re: Assessment of quality of life, information, and supportive care needs in patients with muscle and non-muscle invasive bladder cancer across the illness trajectory. *Journal of Urology*, 204(2), 385-385. <https://doi.org/10.1097/ju.0000000000001114.02>
- National Cancer Institute. (n.d.). *Bladder cancer treatment (PDQ®) – Patient version*. <https://www.cancer.gov/types/bladder/patient/bladder-treatment-pdq>
- Urology Care Foundation. (n.d.). *What to know about BCG for bladder cancer*. <https://www.urologyhealth.org/healthy-living/care-blog/2019/what-to-know-about-bcg-for-bladder-cancer>

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