

# BCG in the bladder to treat cancer



You've been diagnosed with bladder cancer. Your doctor is proposing BCG (Bacillus Calmette Guérin) injections to treat cancer cells in the bladder. This fact sheet describes how this treatment works and the precautions to be taken.

## Why do I need this treatment?

This chemotherapy is used to:

- > treat bladder cancer that is not too deep (superficial) (see the fact sheet [Bladder cancer](#)).
- > prevent recurrence or progression of the cancer after bladder surgery.

## What does this treatment involve?

A small flexible tube (catheter) is inserted into the channel through which urine passes (urethra), all the way into the bladder. This step can be uncomfortable. Talk to your doctor if you're concerned about this.

A small quantity of the drug is then injected into the bladder through this tube. This is called an "intravesical injection".

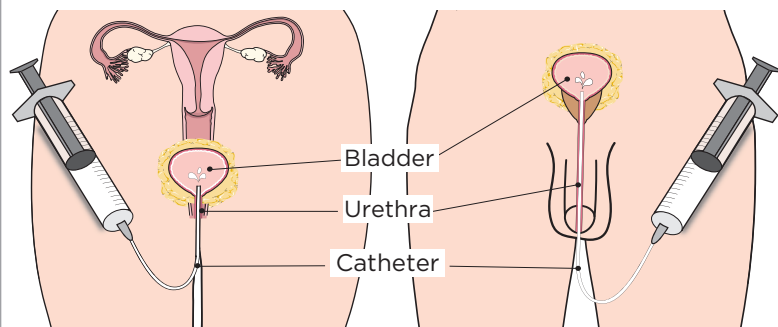
BCG is a vaccine against tuberculosis, an infection of the lungs. This vaccine no longer exists in Canada. It is made of bacteria that have been weakened for use as a drug.

When BCG comes into contact with cancer cells, it causes an inflammatory reaction (tissues swell). This destroys diseased cells. BCG is sometimes given with another drug, interferon. Interferon stimulates your body's defense system. Your doctor will decide whether you need to take that, as well.

## How long does the treatment take?

It all depends on your health status and the type of cancer. Generally the treatments are done once a week for 6 weeks. Then they are repeated according to a schedule decided by your doctor (such as every 3 months, or every 6 months for 3 years). Your doctor will tell you how many treatments you'll need and for how long. This can vary greatly from one person to another.

BCG injection in the bladder



The drug is injected into the bladder through a small tube (catheter).

## Are there risks associated with this treatment?

Not many. Here are some effects that can occur in **very rare cases**:

- A serious infection that affects other organs. If this happens, you'll have to take antibiotics for several months.
- The urethra could become narrower and this could reduce the strength of the urine stream.
- BCG could enter the liver, joints, and skin and cause inflammation in these organs.

## Are there precautions to take BEFORE the treatment?

BCG works best when it's concentrated, so it needs to be prevented from mixing with urine in the bladder. To ensure this:

- > **Don't drink any liquids for 4 hours BEFORE each treatment.**



- > If you're taking any medications that cause urination (**diuretics**), **take them 2 hours AFTER your treatment**, and not before. If you're not sure whether you're taking diuretics, ask your pharmacist or doctor.

Also, before each treatment, tell your doctor or nurse if:

- you're pregnant or breastfeeding
- you have symptoms of urinary tract infection (strong urge to urinate, burning sensation when urinating)

**If you have a urinary tract infection, your treatment may be delayed until it is treated.**

- you have symptoms of a cold, flu, or other infection (throat, teeth...)
- you have other questions that are worrying you

## What are the steps of the treatment?

Each treatment takes 15 to 30 minutes. However, you should plan on 2 to 4 hours in all, to cover:

- > the nurse's assessment
- > preparation of the drug
- > the treatment

### BEFORE THE TREATMENT

- 1 You'll see a nurse before each treatment. The nurse will ask about your health, your last treatment, and any side effects you may have had. Take the time to discuss these things.
- 2 The BCG drug will be prepared once you have arrived. You'll have to wait during that time. The wait time can vary from one visit to another.
- 3 A nurse or an attendant will take you to the treatment room, where you'll receive your BCG treatment.

If you have any questions or symptoms, go to the reception desk to see a nurse.

### DURING THE TREATMENT

- 1 You lie down.
- 2 The nurse cleans your genitals with a disinfectant. Inform the nurse if you're allergic to iodine.
- 3 The nurse then inserts the small tube (catheter) into the channel through which you urinate. The tube is pushed into the urinary tract, all the way into the bladder.
- 4 The urine in your bladder is emptied through the tube.

- 5 The BCG drug is sent into your bladder through the same tube.
- 6 The nurse removes the tube.
- 7 You can then leave, unless you're told otherwise.

#### AFTER THE TREATMENT



#### ATTENTION

Don't urinate for 2 hours after the tube is removed.

#### Then, 2 hours after the tube is removed:

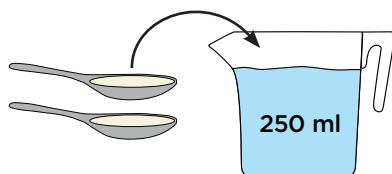
- > Urinate.
- > Drink at least 10 to 12 glasses of liquid per day during the 48 hours after the treatment. This will reduce the side effects (see paragraph below).

#### For 6 hours after EACH treatment

To make sure that no one close to you is in contact with the drug:

- > Urinate while sitting on the toilet to avoid splashing.
- > After urinating, pour 2 cups of pure bleach into the toilet and close the lid. Let it sit for 15 minutes. **Then flush twice.**
- > After urinating, wash your genitals with soap and water.
- > If there are splashes, clean the toilet and seat with diluted bleach (see recipe below) and rinse with water.

Clean everything that has come into contact with urine (such as the toilet seat) with bleach diluted in water. Use 30 ml (1 ounce) of bleach for 250 ml (1 cup) of water. That is, 2 tablespoons for 1 cup.



- > Wash your hands before and after using the toilet.
- > Wash separately any clothing that may have come into contact with urine.
- > If skin has been in contact with urine, clean it with soap and water.

#### Are there any precautions to take after the treatments?

To make sure your partner has no contact with the drug, avoid sexual relations for 24 hours after treatment. If you have sex during the week following the treatment, use a condom.



#### Can I be pregnant during the treatment?

No, pregnancy must be prevented during all of your treatment. Choose a reliable contraceptive method that you can use throughout the treatment. Spouses of men being treated should also use contraception throughout the treatment.

Wait 6 months after the treatments have ended before trying to have a child. If you have questions about this, talk with your doctor.

It is also important not to breastfeed during your BCG treatment.

#### Are there any side effects?

During the 2 days following the treatment, you might experience:

- Difficulty urinating
- Pain in your lower abdomen when urinating
- The need to urinate often and in small amounts, day or night
- Blood or whitish or brownish deposits in the urine

- Mild fever, less than 38.3°C (100.9°F) or flu-like symptoms (fatigue, chills, headache, sore throat, etc.). In this case, take **acetaminophen** (such as Tylenol).
- Fatigue
- Loss of appetite

## What should I watch for after the treatment?

Call the clinic where you received your treatment if:

- > Side effects last more than 2 days or get worse.
- > You have a lot of blood in your urine for more than 2 days after treatment. After 2 days, your urine should be clear.
- > You have joint pain for more than 2 days after your treatment when you had no pain before.
- > You cough all the time
- > You have chills or you feel very unwell.
- > You have heartburn (nausea) or vomiting.
- > You have diarrhea.
- > Your eyes hurt or they are red or irritated.
- > You aren't able to urinate.



### Call a CHUM nurse:

- If your temperature taken by mouth is higher than 38.3°C (100.9°F).
- If, 2 days after your treatment, your temperature taken by mouth is higher than 38.0°C (100.4°F) for more than 1 hour.

This service is available 24 hours/day, 7 days/week. When calling, be sure to have your health insurance card on hand.

> **514 890-8086**

## Who can I contact for help or to ask questions?

The Oncology Clinic:

Tel.: .....



### USEFUL RESOURCES

Bladder Cancer Canada:  
> **bladdercancercanada.org**

Canadian Cancer Society:  
> **cancer.ca**

Other health sheets published by the CHUM are available. Ask for those that might fit your situation.



You can also find them on our web site  
**chumontreal.qc.ca/fiches-sante**



### Questions


Translation of this fact sheet made possible thanks to funding from the CISSS des Laurentides.

*The content of this document in no way replaces the recommendations and diagnoses made, or the treatment suggested by your health professional.*

To find out more about the Centre hospitalier de l'Université de Montréal  
**chumontreal.qc.ca**