

What is BCG treatment?

- ◆ BCG is a live vaccine used to vaccinate against TB (tuberculosis) but is also used to treat bladder cancer
- ◆ It is put into the bladder through a catheter (hollow tube) to stop or slow down re-growth of bladder cancer.
- ◆ When it is put into your bladder it causes an immune response which causes inflammatory changes within the bladder.
- ◆ BCG treatment is normally given once a week for 6 weeks and continues with a maintenance regime over 3 years.

Are there any reasons why I should not have BCG?

- ◆ If you have a urinary tract infection (UTI).
- ◆ If the initial operation to remove the cancer from your bladder (TURBT) was done less than 14 days before the date of your BCG treatment.
- ◆ If you are taking immunosuppressive medication or are immune-compromised
- ◆ If you have a bleeding disorder
- ◆ If you have active TB and are receiving treatment
- ◆ If you are breast feeding. If you are pregnant or trying to conceive you should discuss this with your doctor before any treatment is started.
- ◆ If you have had a flu or shingles vaccine within the last 6 weeks.

Is there anything I need to do before my treatment?

- ◆ You should limit your fluids for 6 hours before treatment. One glass of fluid may be taken with breakfast. You can eat normally. By drinking less your kidneys will produce less urine. This will help prevent the BCG being diluted and will also make it easier for you to hold the BCG treatment in the bladder for 2 hours.

- ◆ If you normally take water tablets (diuretics) either take them after your BCG treatment is completed or at least 6 hours before your treatment. This will reduce the amount of urine produced and will enable you to hold the BCG in the bladder.

What happens during treatment?

- ◆ You will be asked to pass urine to ensure your bladder is empty. A catheter will be passed into the bladder through the water pipe (urethra) to drain any remaining urine. BCG is put into the bladder through this catheter.
- ◆ The catheter will then be removed. In some cases the catheter may be left in the bladder whilst you are having your treatment. If this is so, the catheter will be clamped to keep the BCG in the bladder.
- ◆ You will be asked not to pass urine for the next 2 hours.
- ◆ You can walk about when the BCG is in your bladder.

How long will the treatment take?

- ◆ 2 hours after which you will be able to go home. You should feel well enough to drive yourself home after the treatment.
- ◆ After your first few treatments, if you live within easy reach of the hospital and have your own transport, you may be allowed to go home with the medication in your bladder and pass urine at home after two hours.
- ◆ If you are elderly or infirm, you may wish to arrange for a friend or relative to accompany/collect you.

What to do after your treatment.

- ◆ When the BCG has been in the bladder for 2 hours you will be asked to pass urine into the toilet (men should sit rather than stand to prevent splashing). If the catheter was left in the bladder during your treatment, the BCG will be drained back into a bag before the catheter is removed. If you would like something to drink you can now do so.
- ◆ Sex – you should abstain from intercourse/oral sex for 2-3 days after each treatment. The use of condoms thereafter is advised and should continue to be used for several weeks after your treatment has been completed.
- ◆ The effects on pregnancy are unknown. If you are planning to have children you should discuss this with your doctor as female patients of child bearing age are advised to use birth control during treatments and to wait at least 2 years before conceiving, longer if on maintenance treatment.

- ◆ Breast feeding is not advised when having BCG treatment
- ◆ You will be able to carry out your normal activities after treatment. There are no restrictions on driving, work etc.

Are there any special precautions I should take at home?

- ◆ All the urine you pass during the first 6 hours after treatment should be treated as contaminated. It is recommended that you pour 2 cups of household bleach into the toilet; you should leave this for 15 minutes before flushing. Ensure no one uses the toilet during the 15 minutes or before flushing. Bleach neutralises BCG and you should continue to do this for 6 hours after treatment.
- ◆ Wash hands/genital area with soap and water each time after passing urine for 6 hours after your treatment.

Are there any possible side effects from the treatment? (1)

- ◆ 9 out of 10 people having BCG will develop some side effects; these usually begin within 3-4 hours after treatment and may last 1-3 days.

Common side effects (greater than 1 in 10)

- ◆ Bladder infection
- ◆ Some bladder discomfort.
- ◆ Flu-like symptoms which can last for 1-3 days.
- ◆ Urgently needing to pass urine, and wanting to pass urine more frequently, which can last for two to three days.
- ◆ Failure to complete the course of treatment due to discomfort in the bladder.
- ◆ Blood/Debris in the urine.

Drinking 2 litres of fluid daily, unless advised otherwise, and avoiding tea/coffee for 24hours after treatment will help flush any remaining drug out of the bladder and may ease the above symptoms.

The above are all due to the effect of the treatment on the bladder and are nothing to worry about. These symptoms should ease after 1-3 days.

Occasional (between 1 in 10 and 1 in 50)

- ◆ Narrowing (stricture) of the urethra following repeated use of a catheter.
- ◆ Inflammation which can affect various parts of the body (the liver, joints and the back of the eye).

Rare (less than 1 in 50)

- ◆ Persistent or severe pain after treatment, sometimes leading to removal of the bladder.
- ◆ Generalised and possibly serious infection with the BCG bacteria needing treatment in hospital with powerful antibiotics. This is not TB and there is no risk of catching TB from the treatment.

Hospital-acquired infection

- ◆ Colonisation with MRSA (0.9% - 1 in 110).
- ◆ Clostridium difficile bowel infection (0.01% - 1 in 10,000).
- ◆ MRSA bloodstream infection (0.02% - 1 in 5000).

Contact your GP/Nurse immediately if:-

- ◆ Symptoms persist for more than 2-3 days
- ◆ Urine is cloudy/offensive smelling
- ◆ Temperature $>38^{\circ}\text{C}$,
- ◆ Vomiting
- ◆ Joint pain
- ◆ Skin rash
- ◆ Cough

See a doctor or attend A&E immediately if you develop:-

- ◆ Shortness of breath
- ◆ Difficulty breathing
- ◆ Facial swelling

You need to inform them that you have had BCG treatment.

What follow up will I be given?

- ◆ After you have completed your treatment you will be booked to have a cystoscopy (telescopic inspection of the bladder) in approximately 6 weeks time. This is normally carried out using general anaesthetic or spinal anaesthetic unless your doctor tells you otherwise. Biopsies may be taken at this time. You will be able to go home the day of or the day after your operation.

Will I need any further treatment?

- ◆ Your doctor may decide to continue with maintenance therapy to reduce the risk of bladder cancer recurring. This involves having BCG once a week for 3 weeks at 3, 6, 12, 18, 24, 30 and 36 months following your first course of BCG treatment.

If you have any questions or concerns, please find below contact numbers for the Urology wards and Urology nurses:-

Urology Wards

D 5 West on: - 01633 – 234040 (24 hours)

D 5 East on: - 01633 – 234104 (24 hours)

Urology Day Ward

Tel. No: - 01633 – 656378

Monday – Friday office hours

Urology Outpatient Department

Tel. No: - 01633 – 234979

Monday – Friday office hours

Urology Nurses

Janet Marty Uro-oncology Nurse

Tel. No: - 01633 - 656143

Monday – Friday office hours

Maureen Hunter Urology Nurse Practitioner

Tel. No: - 01633 – 234758

Monday – Friday officer hours

Julie Simpson, Uro-oncology Nurse

Tel. No: - 01633 – 238976 / 01873 - 732081

Stef Young Pre-admission Nurse

Tel. No: - 01633 – 234533

Monday – Friday office hours

Reference:

1. British Association of Urological Surgeons (2014) <http://www.baus.org.uk>