# **Superficial Cancer of the Bladder**

## Introduction

If you have been told that you have cancer of the bladder you are probably feeling shocked and anxious about how this might affect you. This leaflet answers questions many people ask about this common condition.

## What is cancer?

The organs and tissues of the body are made up of tiny building blocks called cells. Normally these cells repair and reproduce themselves in an orderly and controlled manner. However, if for some reason the process becomes out of control, the cells continue to divide, developing into a lump called a tumour. Tumours can be either benign or malignant.

Benign tumours do not spread and although they may grow, they do not usually cause very much trouble. On the other hand, malignant or cancerous tumours tend to grow, invade and destroy surrounding tissues. They may also spread to other parts of the body and are more serious.

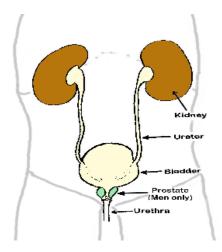
You will read below that in the case of bladder cancer there are two types of malignant tumours which we call invasive and non-invasive. The type you have is the non-invasive or superficial (surface) type. The behaviour of these non-invasive tumours is more like a benign than a malignant tumour.

# Where is the bladder and what does it do?

The bladder is a hollow, muscular, balloon-like organ that collects and stores urine. It is situated in the lower part of the abdomen. Urine consists of water and waste products not needed by the body.

The two kidneys which lie deep in the loins, towards the back under the ribs, produce urine which is carried to the bladder by tubes called ureters. The bladder then stores the urine until it is full enough to empty it through a tube called the urethra. In women the urethra is a very short tube immediately in front of the vagina (birth canal). In men the tube is longer and passes through the prostate gland and penis.

This diagram shows the anatomy of a man:

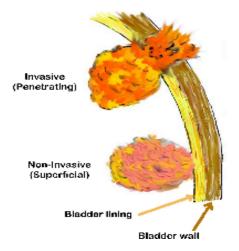


# What is superficial cancer of the bladder?

The tumours in superficial bladder cancer look like tiny frilly mushrooms, with their stems attached to the inner lining of the bladder.

They are called superficial (surface) bladder cancers because they are confined to the inner lining of the bladder and do not extend into the muscle wall, as is the case with invasive tumours which do penetrate the bladder wall. We also use the term "non-invasive" bladder cancer.

They may develop as a single tumour, or there may be many; they may be small (only a few millimetres across) or large (up to several centimetres).



### What are the causes of cancer of the bladder?

The causes of cancer of the bladder are largely unknown, but research is going on all the time into possible causes of the disease. However, cigarette smoking is known to increase the risk of developing bladder cancer.

It is also known that exposure to some industrial dyes and solvents can put people at risk, especially those who used to work in rubber and leather manufacturing. If you think that you may have been exposed in this way, please discuss it with us.

In England and Wales 7000 new cases of bladder cancer are diagnosed each year. It is twice as common in men as in women. The condition most commonly occurs between 50 and 70 years of age but may occur at any age.

# How is it diagnosed?

The commonest symptom of cancer of the bladder is blood in the urine (haematuria). This usually occurs suddenly and is generally not painful. Initial tests usually include scans or X-rays to check both the bladder and the kidneys.

The presence of bladder tumours may be confirmed when a surgeon looks inside the bladder with an instrument called a cystoscope. An initial inspection can be undertaken using a 'flexible cystoscope' that is passed through the urethra and into the bladder under local anaesthetic.

Using this instrument the surgeon can look at the bladder and also take tiny samples. In order to remove most tumours it is usual to be given a general or spinal anaesthetic. The surgeon then uses a resectoscope, which is a thin tube fitted with a telescope through which removal of tissue is possible.

The surgeon can often tell by looking at the tumours whether they are invasive or non-invasive, but samples are always sent to the laboratory for examination under the microscope.

Results are usually available about 14 days later. This gives the surgeon further information about the type of tumour, and whether it extends into the bladder wall.

## What is the treatment for superficial bladder cancer?

#### Surgery and a single dose of chemotherapy into the bladder

Superficial bladder cancer only affects the lining of the bladder, and the tumours can usually be removed very easily using a resectoscope.

The tumour is shaved off the bladder wall and the area is cauterized (sealed) using electrical current to prevent excessive bleeding. In this way several tumours can be treated at the same time. After the tumour/s have been removed, most patients have a single dose of chemotherapy instilled into the bladder via a catheter (draining tube) whilst still on the operating table. The catheter will be inserted into the bladder via the water pipe (urethra) at the end of the operation. The chemotherapy is left in the bladder for one hour and then drained out via the catheter. There is evidence that instillation of chemotherapy into the bladder as soon as possible after tumour removal reduces the chance of tumour recurrence. The chemotherapy will not make you feel sick or lose your hair because it does not enter the blood stream.

Sometimes tiny tumours are treated simply with cautery or laser through the telescope with or without chemotherapy.

After this type of treatment, follow-up (or check) cystoscopies are needed at regular intervals (usually every three to six months at first) because the tumours can come back.

If there is any recurrence of the tumours they can again be removed during the examination. Often this is the only treatment needed for superficial bladder cancer. You will have regular check cystoscopies, with any tumours dealt with as they recur.

If there is no sign of recurrence the interval between the check cystoscopies becomes longer, until they are just once a year. The majority of follow-up cystoscopies are now carried out in the Outpatient department, using a flexible cystoscope with local anaesthetic.

#### Chemotherapy or immunotherapy treatment into the bladder

After each check cystoscopy the doctor or nurse will tell you whether there has been any tumour recurrence. It is a nuisance for you if the tumour/s keep coming back, because it prevents the interval between the follow-up cystoscopies becoming longer.

If there is tumour recurrence at two or three check cystoscopies in a row, your doctor may recommend that you have a course of chemotherapy or immunotherapy into the bladder to try to prevent it coming back.

This treatment usually involves coming to the hospital once a week for a period of treatment.

You are in hospital for up to two to three hours. A catheter tube is passed through the urethra into the bladder. A small amount of fluid containing the drug, which helps to prevent thesetumours recurring, is then put into the bladder via the catheter. The drug is held in the bladder for one to two hours.

There are other leaflets available giving more detailed information about these drug treatments into the bladder. The drugs are not guaranteed to prevent the tumours coming back, but they do have a high success rate.

A check cystoscopy is performed some weeks after completion of the drug treatment to see how effective it has been.

# Are the tumours likely to go further into the wall of the bladder?

In a very few cases the tumours change into an invasive type and start to grow into the muscle wall of the bladder. In this case the treatment may be radiotherapy, chemotherapy or surgery, or any combination of the above. The options would be discussed fully with you.

Remember that most people with superficial bladder cancer are cured completely by resection using the resectoscope with or without drug treatment to the bladder.

Regular check cystoscopies are then required to make sure the bladder remains clear of tumour. In some cases the tumour/s persist in coming back despite surgical removal or drug treatments, but usually remain superficial (non-invasive). This is a nuisance, but does not cause serious harm and is not a threat to life.

We hope this information has been of help to you. If you have any further worries or queries do not hesitate to contact your Urology Clinical Nurse Specialist.

## Sources of information

Uro-Oncology Clinical Nurse Specialists – 0300 131 4500 ext: 770658 Urology Investigation Suite – 0300 131 4500 ext : 770641 Macmillan Cancer Support <u>www.macmillan.org.uk</u> Action Bladder Cancer UK <u>https://actionbladdercanceruk.org</u> Fight Bladder Cancer <u>https://fightbladdercancer.co.uk</u> NHS Smoking Cessation Helpline – 0800 022 4332 <u>www.smokefree.nhs.uk</u> East Sussex Stop Smoking Service – 0800 917 8896 <u>www.stopsmokingineastsussex.co.uk</u>

## Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

#### Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – **0300 131 4731** or by email at: <u>esh-r.patientexperience@nhs.net</u>

## Hand hygiene

The Trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

## **Other formats**

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department.

Tel: 0300 131 4434

Email: esh-tr.accessibleinformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

#### Reference

The following clinicians have been consulted and agreed this patient information: Consultant Urologist: Mr S Garnett, Mr P Rimington Sally Sawyer – Lead Uro-Oncology Clinical Nurse Specialist Clare Callaghan – Urology Nurse Specialist

Next review by:January 2025Responsible clinician:Sally Sawyer – Lead Uro-Oncology Clinical Nurse Specialist

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