PATIENT INFORMATION

Gemcitabine for Bladder Cancer

This information sheet has been given to you to explain the use of gemcitabine to treat your non-muscle invasive bladder cancer. Sometimes this type of cancer is known as superficial bladder cancer.

We are offering you this treatment as the standard treatment is currently unavailable.

This is an unlicensed use of this medicine. There are times when doctors use a medicine in a way not specified by the manufacturer of the medicine because they think it may work well to treat a particular condition.

If you have any questions or concerns after reading this leaflet, please feel free to speak to your nurse, who will be happy to help you – contact details are at the end of this information sheet.

Why do I need gemcitabine treatment?

You have, or have had, non-muscle invasive bladder cancer, which is the most common type of bladder cancer. When you have a cystoscopy (procedure to look into your bladder), non-muscle invasive tumours are usually visible, sitting on the innermost lining of the bladder.

You have already had a procedure (trans-urethral resection of bladder tumour or TURBT) to remove the tumour(s) from your bladder. You will now have a regular cystoscopy to check for any tumour recurrence. After each cystoscopy, your doctor will tell you if your bladder is free of tumour(s) or not. Although non-muscle invasive bladder tumours can mostly be dealt with by surgery alone, your doctor may want you to have an additional form of treatment.

Your doctor has recommended that you have intravesical (within the bladder) chemotherapy. This treatment involves putting gemcitabine directly into your bladder.

Intravesical chemotherapy is used to reduce the frequency of or prevent the tumour(s) from returning. If you decide to have this treatment, you will receive it as an outpatient, in a nurse run clinic. This means you will not see a doctor on these visits but a doctor can be contacted, if needed.

What is gemcitabine?

It is a chemotherapy drug which is used to treat a number of different cancers. When it is put directly into the bladder it attacks the cancerous cells but does little damage to your normal, healthy bladder lining. It is a chemotherapy drug, but because it is put straight into your bladder and not injected into your veins, it is unlikely that you will get the side effects people often associate with chemotherapy, such as hair loss, nausea and vomiting.

How is gemcitabine treatment given?

You will have to have a blood test before every gemcitabine treatment to check your platelet and white blood cell levels – this is because this treatment can cause these levels to drop. This blood test should be done the day before you come for your treatment as this means you will not have to wait whilst your blood is analysed.
Gemcitabine is put directly into your bladder through a fine tube (catheter) to treat the entire lining of your bladder. This method is known as ‘instilling’. The treatment usually involves coming to hospital once a week for six weeks as an outpatient. It takes about one to two hours.

The drug itself stays in your bladder for **up to two hours** and is then taken out through the catheter, or leaves your bladder when you pass urine. For your first treatment, expect to stay in the Endoscopy department for two hours after treatment. On following visits, you may be able to go straight home after the drug has been instilled.

**What do I have to do before each treatment?**

Before each treatment, you will be asked to pass urine to empty your bladder. You should try not to drink very much for four hours before you come to the hospital for your gemcitabine treatment – particularly if you tend to pass urine frequently. By restricting the amount you drink, your urine will be concentrated – this prevents the gemcitabine being diluted while it is in your bladder. You are also more likely to be able to hold onto the drug in your bladder if you have not had much to drink beforehand.

When you come in for your appointment, you will have to give a urine sample before your treatment. This is because you cannot be given gemcitabine if you have a urinary tract infection (UTI) or blood visible in your urine. You will need to have the UTI treated or wait until the bleeding has stopped before your gemcitabine treatment can be re-started.

**What happens at each treatment?**

A catheter is put into your urethra (the tube linked to the bladder that allows urine to exit the body) up into your bladder. Any urine left in your bladder is drained away and about 50 millilitres (mL) of gemcitabine solution is passed through the catheter and into your bladder. This catheter is then either removed from your bladder or left in place until the treatment is finished.

To keep the drug in contact with your bladder, you will be asked not to pass urine during treatment. If you need to pass urine before this time then please tell your nurse. You will need to pass urine safely into a designated toilet – this is so we can make sure the medicine is neutralised before flushing and help to prevent any spillages or accidents.

The gemcitabine will be removed using a catheter if this is still in place or you will be asked to pass urine as normal into a toilet. Men will be asked to sit down to avoid the drug splashing onto the skin. Then 50mL of household bleach is put down the toilet and left to stand for 15 minutes before flushing. This neutralises the drug (bleach should never be applied to your skin or taken by mouth).

**What should I do after each treatment?**

It is important to avoid getting the gemcitabine in contact with your skin, so please wash your hands and genitals with soap and water immediately after passing the drug into the toilet. If the solution does get on your skin, do not worry too much. It may cause a slight rash if not washed off, but if you wash it off immediately with warm, soapy water, it will not harm your skin.

**Asking for your consent?**

We want to involve you in all decisions about your care and treatment. If you decide to go ahead with this treatment, we will ask you for your written consent.
What are the side effects?

Most patients do not experience any major problems with this treatment, but it may irritate your bladder. After each treatment you may notice you:

- have discomfort on passing urine
- need to pass urine often
- have blood in your urine
- develop a urinary tract infection
- experience fatigue
- have nausea and vomiting
- experience chills.

Less common side effects

Thrombocytopenia (low platelet count) – this causes bruising or bleeding. Gemcitabine can lower the body’s production of platelets (which help blood to clot). Let your doctor know if you have any unexplained bruising or bleeding, such as nosebleeds, blood spots or rashes on the skin, and bleeding gums.

Neutropenia (low white blood cell count) – a low number of white blood cells in the blood means that the immune system is weakened and the body can’t fight off infections as well as it should. This increases the chances of the body developing a serious infection such as neutropenic sepsis. Symptoms of neutropenic sepsis include fever and rigors (shivers). Check your temperature if you feel unwell. A normal temperature is between 36 and 37.2°C (96.8 and 99°F). If it is around 38°C (100.4 ºF) check it again in one hour and contact hospital if it is still raised. If it is 38.5ºC (101ºF) or above call the hospital straight away - contact details are at the end of this leaflet.

Some patients may not have these symptoms but just feel generally unwell. There may also be more specific symptoms related to the source of infection, such as diarrhoea, cough or discomfort when passing urine –please contact your nurse specialist if you have any concerns.

These problems will either get better within a few days or you may need treatment to clear them up. If your symptoms do not improve after two to three days, contact your nurse specialist for advice. To help prevent these problems, it is a good idea to increase your fluid intake after each treatment for a couple of days. This will help to flush any remaining drug from your bladder; although you may want to reduce the amount you drink after 8pm so you don’t disturb your sleep.

If you notice that your urine is smelly or cloudy you should contact your GP as this may be a sign of a urine infection. You will need to give a urine sample and may need antibiotics. This is unlikely to be due to the gemcitabine, but can happen after a catheter is put in the bladder. Please tell your specialist nurse of any side-effects you have at the time of your next visit or by telephone.

To prevent irritation for yourself or your partner, it is best not to have sexual intercourse for at least 24 hours after each treatment with gemcitabine. Please also use a condom throughout the course of your gemcitabine treatment and for one week after.

When will I find out the results of the treatment?

A cystoscopy is performed under general anaesthetic 6-12 weeks after completing the course of
gemcitabine, to find out how successful the treatment has been. You will be sent an appointment for this in the post and your nurse will confirm this date on your last treatment visit.

You will also need to supply a urine sample to the Urology Department at West Suffolk Hospital four weeks after you finish your treatment.

Your tumour(s) may return. If this happens your doctor will discuss this with you in more detail and, talk to you about any alternative therapies that might be suitable for you.

**Contact us:**

If you want any more information or have any questions or concerns about your treatment please do not hesitate to contact the Urology Department on the numbers below:

Urology Clinical Nurse Specialist
Call: 01284 712806 Monday to Friday 9.00am to 5.00pm
(you may need to leave a message).

Ward G1 (Macmillan In-patient Unit) on 01284 713234

Out of Hours Service call 111 (if you have a raised temperature).

*West Suffolk NHS Foundation Trust would like to thank Guy’s and St Thomas’s NHS Foundation Trust for allowing us to adapt their leaflet to our needs.*