

Chemotherapy

An information guide



Chemotherapy

Introduction

Your doctor has prescribed a course of chemotherapy for you and you may feel confused and anxious about it. We hope that this leaflet will help you with your treatment and some of the tests and investigations that you may need.

As there are many different types of cancer, it is best to discuss specific details of your own treatment with your doctor or nurse. They will then be able to give you some written information. Please remember that the medical and nursing staff are always happy to answer any questions that you or your family may have about your treatment.

You can contact them by telephone; contact numbers are at the back of this leaflet. It may help you to write down questions you would like to ask.

What is chemotherapy?

Chemotherapy means using drugs to destroy cancer cells. Many types of drugs are used in chemotherapy, all of which attack cancer cells in different ways. For this reason, we often give several drugs together to increase the effectiveness of treatment. Chemotherapy can be used alone or with radiotherapy.

How does chemotherapy work?

The drugs are carried by the bloodstream to all parts of the body where they act by interfering with the growth of rapidly growing cells. The cells of some normal tissues grow rapidly, for example, the cells of the hair roots, mouth, bone marrow and lining of the bowel. These may be temporarily affected by chemotherapy.

Is there anything I should tell my doctor or nurse before or during my drug treatment?

You should tell your doctor/nurse if:

- You have an infection before you start the drug treatment
- You are pregnant, become pregnant or are breast feeding
- You have an allergic reaction to the drug, such as becoming short of breath, or developing a rash, swelling or itch
- You are more prone to bleeding, with bleeding gums, nosebleed or unexplained bruising
- You have signs of an infection during treatment, such as a high temperature and sore throat
- You find blood in your urine.
- You feel more tired after starting the treatment
- You feel or are sick – your doctor may give you some anti-sickness treatment
- Your hands or feet start to tingle or become numb.

Agreeing to treatment

The doctors and chemotherapy nurse will discuss the treatment recommended for you and explain how it will affect you. Once you have had all your queries and concerns about your treatment answered to your satisfaction, you will then be asked to sign a consent form.

How often is it given?

This depends on the type of treatment you are having. In most cases, each cycle of chemotherapy will be followed by a rest period of between one and four weeks. There is usually a maximum of six cycles.

How is my treatment organised?

We hope this will help you to understand why at times you might have to wait for your treatment to start. It is a complicated procedure, which can take time. It may seem that little is happening, but there is a lot of vital preparation going on behind the scenes.

Reasons why you may have to wait:

- If your treatment is altered on the day.
- If you have to wait for the results of tests before your treatment can start.
- For certain very expensive drugs, we operate an 'on-hold' system. This means that when we know that your blood tests are satisfactory, we will then prepare the medication. In this way, we try to avoid wasting expensive drugs (which cannot be recycled or used for another patient). From taking your blood sample to the making up of the drug could be approximately two hours.
- Some chemotherapy requires a pre-medication of drugs at least 30 minutes before starting the infusion.

What actually happens?

These are the usual steps for people having chemotherapy. However, there can be variations depending on your treatment:

- You will be given an appointment.
- On arrival, you may need to have a blood test before starting the treatment. If this is the case, then a cannula (small needle) will be inserted and the blood sample taken.
- There will then be a wait of between 30 minutes to an hour for the results of your test.

- There is no need for you to see your doctor on this visit, as you will have seen them the week before treatment. However, if you want to then this can be arranged.
- Once we know that your blood results are satisfactory your treatment can be started.
- Once your treatment has been given, you will receive your oral medication to take home. The nurse will explain how the tablets should be taken.
- You will be given two appointments. One for your assessment the week before your next treatment and the other for your next chemotherapy treatment.

Do I still have to stay in hospital?

Sometimes it may be necessary, although most patients receive their treatment as a day patient. It may be necessary for you to be admitted if a new treatment is being started or a series of drugs diluted in a large volume of liquid is being given. Most patients only stay two or three nights. Please remember that your hospital visits can be lengthy. It is best to allow for a full day, although some patients will finish their treatment in a shorter time.

For your first treatment, it is a good idea for a relative or friend to drive you home after treatment, as you may not feel up to it yourself. At other times you can continue driving normally.

What happens if I don't have any transport?

If you are unable to make your own arrangements for admission or to attend as a day patient, transport may be arranged for you by the ward/hospital or nurses in the clinic.

If you require transport, please be sure to inform the ward or nurse at the clinic. 48 hours notice is required. Also, if you find that you no longer require transport that has already been booked, then please let the nurse/ward know as soon as possible. Again, 48 hours cancellation notice is desirable.

How is chemotherapy given?

Chemotherapy can be given in different ways:

- By mouth: as a tablet, capsule or liquid.
- By injection; into a vein (intravenous) or by injection into the tissues under the skin (subcutaneous).

Chemotherapy may be given straight from the syringe into a small needle (cannula) that has been placed in the vein. This is known as a bolus injection. Sometimes, it is necessary to dilute the drug into a large volume of fluid and this is then given through an infusion set.

Some treatments consist of a combination of injections and tablets. In these cases, each cycle usually starts with an injection and is followed by tablets, which are taken for a period of up to two weeks. Your nurse will tell you when to start taking the tablets.

Other tablets and medicines

Please make sure that the doctor knows about any tablets or medication you are taking for other conditions – including any that you buy from the chemist. These can usually be continued unchanged during chemotherapy – but do check. We will send your family doctor full details of the treatment prescribed in hospital.

Herbal remedies and health supplements

Some commonly taken supplements and herbal remedies can interfere with cancer treatments. Please tell your doctor about any supplements you may be taking. e.g. vitamins, garlic capsules, cod liver oil, Echinacea and St. Johns Wort. Your doctor may ask you to stop taking these while you are having chemotherapy.

Flu vaccination

If you are thinking of having a flu vaccination, it is best to discuss this with your consultant at the hospital before going ahead.

Blood tests and the bone marrow

We take a blood sample before each treatment is started. We need to check that your blood count is normal before you have the next cycle of chemotherapy.

A blood count means the number of red blood cells, white blood cells and special cells called platelets in the blood. All these blood cells are made in the bone marrow.

Chemotherapy can affect the bone marrow, causing a temporary fall in the number of these cells.

Sometimes, treatment has to be delayed by one week if your blood count has not returned to normal following the last cycle of treatment.

If this happens, the delay does not reduce the effectiveness of your chemotherapy.

Red blood cells – These give the blood its colour and carry oxygen from the lungs to all parts of the body. A reduction in the number of these cells is called anaemia. A mild form of anaemia may result from chemotherapy, but this usually improves without any treatment. Sometimes, a blood transfusion is necessary.

White blood cells – These help to fight infection. When their numbers fall, the body's resistance to infection is lowered. You may hear this referred to as neutropenia or being neutropenic. The white blood cell count usually improves without any treatment, but the doctor may prescribe injections to aid the recovery of white blood cells.

Platelets – These are the cells needed to help your blood to clot. If the number of platelets falls, you may notice that your gums bleed when brushing your teeth. Nosebleeds can also occur and your skin may bruise more easily than normal. Sometimes a platelet infusion is necessary but the platelet count usually improves without any treatment.

Other tests

Quite often we may need to check the function of other organs before starting chemotherapy. Depending on the results of these tests, treatments may sometimes have to be modified.

Kidneys – Most chemotherapy is removed from the body through the kidneys, so we have to make sure your kidney function is satisfactory before we start treatment. To do this we will ask you to collect urine for 24 hours in special bottle. It is very important that you collect all your urine during this time. The urine collection may have to be repeated, or an extra test performed, if the result is low.

Heart – Certain chemotherapy drugs can affect the heart. The doctor will ask if you have any heart problems, such as high blood pressure or angina. If so, you may need some additional tests such as a heart scan (echocardiogram) or a tracing of your heart (ECG – electrocardiogram).

Liver – We will monitor how your liver is working from the blood tests we do throughout your treatment.

Are there any side effects?

Chemotherapy affects some normal blood cells and when it does, side effects can occur. This section describes the common side effects you may have in the days and weeks after treatment and some of the things you can do to help.

The side effects you will have depend on the particular drug or combination of drugs you are taking. Your doctor or nurse will tell you what to expect. Some people do not get any side effects, but if you do, please tell the doctor or chemotherapy nurse so that we can help you.

Sometimes, chemotherapy leaks outside the vein. This is called extravasation. With certain drugs this can be quite serious. We will do our best to minimise this, but if you develop pain during the

injection or afterwards around the site of the injection then please let us know.

Infection

Most chemotherapy drugs reduce the body's resistance to infection. Due to this, a minor illness can quickly develop into something more serious needing hospital treatment. If you develop a sore throat, cough, shivering or a temperature, please contact the ward immediately. Full contact details are given on page 18 of this leaflet.

How can I help myself to avoid infection?

Most infections come from bacteria (germs) that we normally carry on our skin or in our bowel. They are harmless when the body's ability to fight infection is normal. It is only when resistance is low that they can cause an infection.

To reduce the chance of infection:

- Maintain good personal hygiene.
- Stay away from people who have a disease you can catch. These include a cold, flu, measles, or chickenpox. If you have not had chickenpox and you come into contact with someone who does have chickenpox or shingles, then please get in touch with the hospital as action may need to be taken.
- Be careful not to cut or nick yourself when using scissors, needles or knives.
- Use a soft toothbrush that won't hurt your gums.
- Don't squeeze or scratch pimples.
- Clean cuts and scrapes straight away with warm water, soap and an antiseptic.
- Wear protective gloves when gardening or cleaning up after animals.
- Do not have any vaccinations without checking with your doctor.
- If you do bite your nails, then try and stop.

Nausea and vomiting

Sometimes chemotherapy causes nausea (feeling sick) and/or vomiting. If this is likely with your treatment, you will be given an anti-sickness injection and tablets or medicines to take home.

You may notice mild nausea, but if you experience persistent nausea or vomiting, then contact your chemotherapy nurse for further advice.

There are several anti-sickness treatments available. If the first one you are given has not worked, we can usually find one that does.

It is best to avoid heavy meals for 24 hours after treatment. Try light snacks instead and drink freely. It is also best to avoid alcohol at this time. A loss of appetite for 24 hours or so after chemotherapy is quite common.

- Try eating more frequent meals, rather than large meals.
- Have small meals a few hours before your treatment, not just before.
- Avoid eating or preparing foods when you feel sick.
- Avoid fried, fatty or strong smelling foods.
- Drink plenty of liquid, but not directly before eating.
- If you are suffering from diarrhoea, eat less fibre, raw fruit, cereals and vegetables.
- Eating fresh pineapple chunks will keep your mouth fresh and moist.
- If you feel that you cannot eat, you can replace the food with nutritious high calorie drinks, which are available to buy from most chemists. Seek advice from your nurse/doctor.

Fatigue

Some chemotherapy will make you feel very tired. Take more rest and try to get help with the housework. You may also want to take some time off work. However, it is beneficial to take gentle exercise as well as taking rest.

Dietary

- Thoroughly cook raw food from animal sources such as beef, pork and chicken.
- Thoroughly wash raw vegetables before eating.
- Keep uncooked foods separate from vegetables, cooked foods and ready-to-eat foods.
- Do not drink raw (un-pasteurised) milk or eat foods made from raw milk, such as bioyoghurt.
- Wash hands, knives and cutting boards after handling uncooked foods.
- Avoid soft cheeses – feta, Brie, Camembert and blue-vein cheese. It is OK to have hard cheese, cream cheese, cottage cheese and yoghurt as long as they are pasteurised – look out for this on the label.
- Re-heat leftover foods or ready to eat foods until steaming hot before eating.
- Avoid pâté and be cautious with take-aways and delicatessen type foods (pate, cold meats etc).
- Avoid foods made with raw eggs, e.g. homemade mayonnaise and some desserts. Eggs should be cooked until hardboiled (minimum cooking time 10 mins).

Constipation and Diarrhoea

Some chemotherapy can cause temporary diarrhoea or constipation.

If you are finding it difficult to pass bowel motions, try to eat plenty of fruits, high fibre foods and drink lots of fluids. Mention this to your nurse or doctor, as they may be able to give you a suitable laxative.

Sore mouth

To maintain a healthy mouth, clean your teeth twice a day using a medium/small head toothbrush and fluoride toothpaste. Rinse your mouth thoroughly with water after cleaning.

Chemotherapy may cause the lining of your mouth and throat to become sore and sometimes ulcerated. If this occurs, continue to clean your teeth, but use a soft toothbrush. We suggest brushing four times a day, preferably after meals and before bed.

- We may recommend an antibacterial mouthwash (Chlorexidine) twice daily. This can be prescribed by either your GP or hospital doctor.
- Do not use commercial mouthwashes, which tend to be harsh, as they can dry and irritate the tissues.

If you develop a sore mouth, avoid hot liquids, spicy foods and drink plenty of fluids. If the soreness does not clear up quickly, then this may be a sign of infection. You should contact your GP or hospital doctor for advice.

If your mouth becomes too sore, use water rinses as often as you find helpful – at least every 2 to 4 hours. Some people find sucking ice helpful.

Loss of hair

Some drugs can cause hair thinning or even complete hair loss. You may also lose your body hair including eyebrows and pubic hair. Hair usually begins to fall out 10 – 14 days after treatment starts.

This is only temporary and your hair will grow back normally when your treatment has finished. Some people start to get their hair back before chemotherapy is over.

Your scalp may begin to feel tingly or painful. This is normal when the hair begins to fall out. Take simple painkillers such as Paracetamol if needed.

- Think about having your hair cut short, as long hair can pull on the scalp and fall out faster.
- Use a soft baby brush.
- Avoid hair dryers, curling tongues and curlers.
- Gently pat hair dry instead.

- Avoid colouring or perming your hair.
- Consider a wig early in your treatment and discuss it with your nurse.

A wig service is available on the National Health Service. It is a good idea to get your wig before you lose a lot of hair so that it can be matched with your natural colour.

Some people select a longer wig and have it styled by their hairdresser. You can see a specialist wig fitter before your treatment begins. Scarves or turbans are also available.

We are able to give demonstrations and advice on how to tie scarves and wear hats and turbans. These are available to buy on the ward. Please ring your ward for an appointment.

Feelings and emotions

Sometimes during chemotherapy you may begin to feel anxious and on edge, or low and fed up. This often improves as treatment progresses, but if you continue to feel like this, please let your doctor or chemotherapy nurse know as they can usually help.

Veins

When chemotherapy is injected intravenously, the veins can sometimes become hardened and sore or darker in colour.

The veins will usually return to normal gradually. We can continue your treatment using other veins, a central line or a PICC line.

A central line is a small tube, which is passed into a vein in the chest. This is usually put in under local anaesthetic and you may be offered a sedative. The line is used to take blood and to give chemotherapy, therefore reducing the need for needles.

A PICC line is similar to a central line but is placed in the arm instead.

Care in the sun

It is important to take special care in the sun. Some chemotherapy can make your skin more sensitive to the sun. Try to avoid too much exposure to the sun and sit in the shade when possible.

Wear loose clothing and use a high factor sun cream. If you have lost your hair, remember to protect your head, ears and back of your neck from the sun by wearing a hat.

Skin colouring

Sometimes, the chemotherapy may affect your skin colouring causing it to look tanned or darker especially around the joints. This is known as 'hyperpigmentation' and will disappear after the treatment is finished. Sometimes, chemotherapy can alter your skin's sensitivity to light.

Other side effects

These only occur with certain drugs and include:

- Tingling or numbness in the tips of your fingers and toes.
- Alteration in taste.
- Cystitis and bladder irritation.

If any of these effects are likely with your treatment you will be told beforehand. Some of these may be described on the chemotherapy cards. As with the other side effects of chemotherapy, they are usually temporary.

Long term side effects

Most of the effects will disappear soon after your course of treatment is complete. However, there can be lasting effects. In addition to the effects on reproduction, chemotherapy can also affect the heart and lungs.

There is also a small increased risk of a second cancer. If this applies to you, your hospital doctor will discuss this with you in full.

Can I go out?

Yes. It is best for you to carry on as normal. Sometimes, you may not feel like going out, but when you do feel well, try and do as you normally would.

Can I still go to work?

There are no hard and fast rules on this.

Some patients feel well enough and the nature of their job enables them to continue with work, but everyone is different. It is best to discuss this with your doctor.

What happens if I get into financial difficulties?

Finance can be a major problem, as chemotherapy treatment can be a lengthy process. If you would like to discuss any matters relating to finances, speak to the nurse at your next appointment.

Can I go on holiday?

Before booking a holiday, please discuss this with your doctor, as it may be better to wait until your treatment is over.

It is often possible to fit holidays in between cycles of chemotherapy, although it is not always advisable to go abroad.

As chemotherapy goes on working in the body for some time after treatment, it is best to wait for at least a month after your last treatment before going abroad.

Travel Insurance

If you are planning to go abroad, you may find that there may be exclusions on normal travel insurance policies because you have had a diagnosis of cancer or are currently receiving treatment.

Can I drink and smoke?

It is best to discuss this with your doctor. Generally small amounts of alcohol are safe. However, it is best avoided for the first 24 hours following treatment.

It is not advisable to smoke, but we cannot stop you from doing this. The Northern Care Alliance NHS Group operates a smokefree policy.

Fertility and Contraception

Women

Menstrual periods often become irregular or stop during chemotherapy, but some women do remain fertile. However it is very important that you do not become pregnant whilst receiving chemotherapy, because of the risk of damage to the baby. It is therefore essential to use contraception.

Once the treatment is over, your periods may not return to normal, because chemotherapy can cause infertility. If you have any worries or questions about this, please ask the doctor or chemotherapy nurse.

Please tell your doctor if you are using contraception in case there is a need to change it.

Men

Some types of chemotherapy cause infertility.

If this is likely, your doctor will discuss the possibility of sperm banking before starting your treatment. You may remain fertile during the early stages of treatment, but it is important that you do not father children whilst receiving chemotherapy because of the risk of damage to the baby.

It is therefore essential to use contraception. If you have any worries or questions about this, please ask the doctor or chemotherapy nurse

Risk of Infection

You will be more at risk of getting infections after chemotherapy treatment.

If you feel unwell or you have a temperature of 37.5°C or above please contact the F11 24hr chemotherapy hotline number below for advice.

Do not leave a message – make sure you speak to someone.

Call immediately – any delay could be harmful.

Urgent contact number

F11 24hr chemotherapy hotline on **0161 656 1166**

Useful contacts

F11 Day case reception: 0161 778 5527/5515 (8am – 4pm)

F11 Day case nurses station: 0161 778 5584/5586 (8am – 6pm)

F11 Inpatient nurses station: 0161 778 5514/5519 (24hrs)

Macmillan Haematology Clinical Nurse Specialist Team:

Telephone: **0161 778 5297**

Monday - Friday 9:00am - 5:00pm

Your consultant is

Your hospital no. is

Notes

If English is not your first language and you need help, please contact the Interpretation and Translation Service

Jeśli angielski nie jest twoim pierwszym językiem i potrzebujesz pomocy, skontaktuj się z działem tłumaczeń ustnych i pisemnych

اگر انگریزی آپ کی پہلی زبان نہیں ہے اور آپ کو مدد کی ضرورت ہے تو ، براہ کرم ترجمانی اور ترجمہ خدمت سے رابطہ کریں

Dacă engleza nu este prima ta limbă și ai nevoie de ajutor, te rugăm să contactezi Serviciul de interpretare și traducere

ইংরাজী যদি আপনার প্রথম ভাষা না হয় এবং আপনার সাহায্যের প্রয়োজন হয় তবে অনুগ্রহ করে দোভাষী এবং অনুবাদ পরিষেবাটিতে যোগাযোগ করুন

إذا لم تكن الإنجليزية هي لغتك الأولى وتحتاج إلى مساعدة ، فيرجى الاتصال بخدمة الترجمة الشفوية والتحريرية

☎ : 0161 627 8770

@ : interpretation@pat.nhs.uk

To improve our care environment for Patients, Visitors and Staff, **Northern Care Alliance NHS Group** is Smoke Free including buildings, grounds & car parks.

For advice on stopping smoking contact the Specialist Stop Smoking Service on 01706 517 522

For general enquiries please contact the Patient Advice and Liaison Service (PALS) on 0161 604 5897

For enquiries regarding clinic appointments, clinical care and treatment please contact 0161 624 0420 and the Switchboard Operator will put you through to the correct department / service

The Northern Care Alliance NHS Group (NCA) is one of the largest NHS organisations in the country, employing 17,000 staff and providing a range of hospital and community healthcare services to around 1 million people across Salford, Oldham, Bury, Rochdale and surrounding areas. Our Care Organisations are responsible for providing our services, delivering safe, high quality and reliable care to the local communities they serve.

The NCA brings together Salford Royal NHS Foundation Trust and the hospitals and community services of The Royal Oldham Hospital, Fairfield General Hospital in Bury, and Rochdale Infirmary (currently part of The Pennine Acute Hospitals NHS Trust).



www.facebook.com/NorthernCareAllianceNHSGroup



www.linkedin.com/company/northern-care-alliance-nhs-group



Northern Care Alliance NHS Group (NCA) @NCAAlliance_NHS

Date of publication: January 2006

Date of review: May 2020

Date of next review: May 2022

Ref: PI_DS_186

© The Northern Care Alliance NHS Group

www.pat.nhs.uk

www.northernalliance.nhs.uk

