



Northern Health
and Social Care Trust

Understanding Cytotoxic Chemotherapy

Introduction

Chemotherapy is part of your continuing treatment.

This booklet has been compiled in an effort to help you understand cytotoxic chemotherapy.

It is your personal record; after reading it you may wish to note down any questions you have. These can then be discussed with the team who are providing your care.

What is cytotoxic chemotherapy?

Chemotherapy is the use of anti-cancer (Cytotoxic) drugs to destroy cancer cells.

Chemotherapy can be used alone to treat cancer or together with surgery and/or radiotherapy.

How do cytotoxic drugs work?

The drugs enter the bloodstream and are distributed to all parts of the body. They destroy cancer cells by interfering with their ability to divide and grow.

What is the difference between chemotherapy and radiotherapy?

Radiotherapy is a local treatment, it can only kill cancer cells with a beam of radiation (xrays).

Chemotherapy is a systemic (whole body) treatment. The cytotoxic drugs circulate around the body to attack cancer cells in different parts of the body.

How is chemotherapy given?

Generally, chemotherapy is given in one of three ways:-

- by mouth
- by injection into a muscle or under the skin
- into a vein with a syringe or in an infusion (drip)

You may have one drug or several drugs together or different drugs given at different times (your doctor or nurse will explain your particular drug treatment to you).

Why does the doctor or nurse wear protective clothing when handling and administering cytotoxic drugs?

Some of these drugs are known to have local irritant effects on the skin and eyes.

Precautions

If contamination is suspected, the area must be rinsed thoroughly with large amounts of water and then washed with soap and water.

How often must I have chemotherapy?

This will depend on the drug treatment selected specifically for you. Generally, each course of treatment is followed by a 'rest' period. The 'rest' period is often longer than the treatment time and its purpose is to allow your body to recover from the effects of the drugs.

How long will my treatment last?

The frequency of your treatment and the length of time it takes will depend on several factors including the type of cancer you have, the drugs you are taking, the response of the cancer cells to the drugs and any side effects the drugs may cause.

Must I always be admitted?

No. Most patients receive their chemotherapy as outpatients. Sometimes it is necessary to stay overnight in the hospital when treatment is started or if a series of drugs and fluid infusions are to be given. In most cases a 24 - 48 hour admission is all that is needed.

There are special treatments which need longer admissions and, if needed, they will be fully explained to you.

Can I drive following chemotherapy?

It is advisable to have someone to drive you home following your treatment as some drugs may make you feel dizzy.

What about my holidays?

Generally most drug combinations can be adapted to fit in with holidays. Please tell your doctor in advance so that your treatments can be planned around your holiday arrangements.

What if I am taking other medicines?

It is important to tell your doctor about any other tablets, injections or medicines you are taking as it is sometimes necessary to prescribe an alternative drug for you. If you are admitted to hospital please bring all your current medicine with you to give the ward nurse.

Please consult your hospital doctor before taking other medication.

Will chemotherapy hurt?

Chemotherapy is no more painful than any other injection or blood test. Occasionally veins become hardened and sore. Please tell your chemotherapy nurse or doctor if the injection hurts in any way.

Activities

Many people lead a completely normal life in every respect while they are having chemotherapy treatment. Some people do find they must cut down on the number of activities and take life more slowly for the duration of their treatment. The golden rule is do what you like within the limits of comfort.

Can I have a drink?

Generally it will be quite safe for you to have a small amount of alcohol if you feel like it but there are one or two anti-cancer drugs which may interact with alcoholic drinks. You will be told about these if necessary.

Are there any side effects?

This depends very much on the type of chemotherapy you are given. In addition everyone is very much an individual and reacts to chemotherapy differently.

Some people may have no side-effects at all. We can offer you help for most side effects so please tell your doctor or nurse if you are feeling in any way different from normal.

Some side effects that occur with many drugs are discussed throughout the text with a description of the tissues most affected.

You are advised to take precautions when handling body fluids following your course of chemotherapy.

Wear gloves when disposing of soiled linen.

Rinse clothes separately following spillage of body fluids.

Advice will be given regarding your individual protocol.

How chemotherapy affects your body

The Bone Marrow

Your bone marrow is responsible for manufacturing the cells in your blood (white blood cells, red blood cells and platelets). A blood test shows the number of blood cells that are being produced by your bone marrow.

Anti-cancer drugs can lower the number of blood cells by depressing the bone marrow. To monitor this it is necessary to have blood tests.

How Often Must I Have Blood Tests?

Blood tests will be taken prior to treatment or sometimes between treatment if your doctor requests it. This test is called a 'blood count'.

The following cells are measured by the blood count:-

White Blood Cells help you fight infection. If you ever have a high temperature or notice any other signs of infection notify your hospital doctor.

Platelets are tiny structures smaller than red or white cells and prevent you from bleeding and bruising. You may notice you bruise more easily than usual or that you have a tendency to bleed from your nose or gums. Rarely, small groups of red-purple spots may appear on your skin. Please notify the doctor if any of these occur.

Red Blood Cells carry oxygen to all parts of the body. If your treatment affects these cells, you may notice you are feeling tired and look pale. If so, slow down, do less.

Any of the above effects can be corrected by lengthening the rest period between treatments or by adjusting the dosage of the drugs. A blood transfusion is a quick and easy way of increasing the number of red cells.

There are other blood tests, x-rays and scans which are also often required as part of the diagnostic procedure.

The Digestive System

Your mouth may become sore if the drugs affect its lining. It is very important that you take regular mouthwashes and clean your teeth after eating in order to prevent infection. If you have a sore or ulcerated mouth use a soft toothbrush, avoid spicy food and very hot or very cold drinks. Some chemotherapy drugs can cause your taste to change. Food may taste more salty, bitter or metallic. Normal taste and smell returns within two to three months after treatment stops.

Sickness is a side effect associated with some chemotherapy drugs. Many people do not have any nausea and vomiting with their chemotherapy, nor does every drug cause sickness. If you experience sickness it may start from a few minutes to several hours after chemotherapy injection, depending on the drugs given. The sickness may last for a few hours and occasionally you may continue to feel sick for several days. There are several anti-sickness drugs (antiemetics) which your doctor can prescribe to help relieve your sickness.

Do not eat a heavy meal immediately before or after your treatment.

Eating small and frequent meals may help if your appetite is poor. There are several nutritious drinks available which may be taken either to replace a meal or in addition to meals eg. Fortisip, Ensure, Liquisorb and Fresubin.

Diarrhoea or constipation may occur with a few drugs and can easily be managed by tablets, medicine or diet. Please tell your doctor or nurse if you have any problems of this nature and remember to drink plenty of fluids.

If you have diarrhoea eat less fibre, avoiding raw fruits, cereals and vegetables.

If you have constipation increase your intake of fibre, raw fruits, cereals, fluids and vegetable. Prune juice and hot drinks can often stimulate bowel action.

If you are worried about your diet please ask to see the dietitian.

Skin

Some chemotherapy drugs can affect your skin. The drugs may cause your skin to become dry, slightly discoloured or more sensitive to sunlight. Rashes should always be reported to the doctor.

Some drugs can cause damage if they leak out of the vein while they are being injected. It is important that you notify the nurse or doctor if you feel any 'burning' or pain when you are receiving the drug. If your arm or hand is sore or painful following the injection, please contact your chemotherapy nurse or doctor.

If your skin becomes dry or itchy, rubbing in a little lanolin cream can help to relieve it. Wear a high factor sun block cream if you are going out in the sun to prevent skin burning. Consider having your hair cut quite short prior to treatment.

Hair

Most drugs may cause partial or even complete hair loss. If hair loss is going to occur, it usually starts within a few weeks of beginning treatment, although very occasionally it can start within a few days. Body and pubic hair may be lost as well. If you do lose your hair as a result of chemotherapy, it will always grow back once you have completed your treatment.

If it is likely you may lose your hair ask your doctor about wigs early, so the wig can be as close a match as possible to the colour and texture of your real hair. A recent photograph is very useful if sending for a wig by post.

Fertility

Other side effects that may occur include those affecting the reproductive system. Menstrual periods may become irregular or cease during chemotherapy treatment. However, contraceptive precautions should be continued as it is medically inadvisable for

you to become pregnant.

In men, sterility (failure of sperm production) can occur. If this is to be a permanent side effect, an opportunity to bank sperm will be offered. Virility (sexual performance) is seldom affected.

Other Effects

Please report any other unusual effects (discomfort on passing urine, blood in urine, headaches, tingling/numbness in fingers or feet) to your doctor or chemotherapy nurse.

IF IN DOUBT - PLEASE ASK

Questions you may want to ask

Where can I get help?

If you have any queries or problems regarding your treatment, or experience any unexpected problems or side effects, please contact:-

Your hospital doctor (Consultant)

One of his/her team

Chemotherapy Nurse

At Ward B1 Antrim Area Hospital
Telephone Number: 028 9442 4505
(After hours and weekend)

Chemotherapy Unit
Laurel House
Antrim Area Hospital
(Monday - Friday 9am - 5pm)
Telephone Number: 028 9442 4201
028 9442 4240

Fax Number: 028 9442 4777

Full blood count result

Date	Result

Your chemotherapy protocol

Date	Drug	Route of admission	Time of admission	Side effects

Bibliography

CANCER INFORMATION AT YOUR FINGERTIPS

Val Speechley and Maxine Rosenfield

CHEMOTHERAPY YOUR QUESTIONS ANSWERED

The Royal Marsden Hospital Patient Information Series No. 1

UNDERSTANDING CHEMOTHERAPY

Bacup Cancer Information Service

UNDERSTANDING NON-HODGKINS LYMPHOMAS

Bacup Helping People Live With Cancer

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