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Patient information leaflets

Advices for cancer patients having chemotherapy treatment

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Introduction

You will be about to start chemotherapy treatment for your cancer. We have written this booklet to give you some advice on how to prevent, lessen or manage any symptoms you may develop during your chemotherapy treatment.

We have divided this booklet into sections for easy use, so that you can find the information that relates to your individual treatment/s. Not all of the information written in here will related to you, as your chemotherapy may not be known to cause some of the side effects discussed.

It is very important that if you experience any of the symptoms we talk about, you have to report them quickly to one of the doctors or nurses looking after you.

We all know that chemotherapy causes side effects and this fact usually frightens people who are told they need to have this treatment for their cancer. Different chemotherapy drugs have different side effects and the extent to which these side effects occur will vary from person to person. The main areas of your body that may be affected by these drugs are where cells within your body rapidly divide, such as blood cells, in the lining of the gut, your hair and skin.

This booklet will begin to give you some important information about the more common side effects chemotherapy causes. It is important that you read and understand this information. This will help to keep you safe while having chemotherapy treatment and help you to feel more in control during this time.

What can I expect to happen to my blood results?

About 40% of your blood is made up of cells and 60% is made up of yellow fluid called plasma. There are three main types of blood cells, made within the bone marrow, each having a very specific and important function in keeping the body healthy. These cells are Red Cells (Erythrocytes), White Cells (Leukocytes) and Platelets. It is important that you understand about the function of these blood cells and the role they play in relation to chemotherapy treatments. This is because most chemotherapy drugs are known to reduce the number of blood cells within the body.

For this reason, it is vital that your blood counts are monitored by you having regular blood tests during the time you are receiving your chemotherapy treatment. Normally, you will have blood tests before starting chemotherapy, at regular intervals in between, and in the three days before the start of your next treatment being given.

It is very important that you know about and know when to tell us about any signs and symptoms which may mean that your blood counts are low.

Red Blood cells (Erythrocytes)

These cells give your blood its red colour. They contain Haemoglobin (Hb) which carries oxygen around your body. The normal amount of Haemoglobin for an adult man is between 13.3 and 16.7 and for an adult woman is 11.8 to 14.8.

If you have lower amounts than this, you can suffer from a condition called Anaemia. Chemotherapy can cause this to happen. If you are anaemic you may feel some of these symptoms;

- More tired than usual
- No energy or motivation to be active
- Have a paler complexion than usual
- Notice cold temperatures or feel cold
- Have swollen ankles
- Become more breathless than normal and/or feel dizzy.

There are a number of ways we can treat anaemia. Firstly, your doctor may choose to wait for your blood counts to recover naturally in their own time. This can happen by allowing the bone marrow time to make more cells.

Or, you may be offered a blood transfusion, or you may be given special injections to help the bone marrow into making these cells more quickly. Your doctor will discuss all of the treatment options with you before choosing the right treatment for you.

If you develop any of the symptoms above it is important that you contact the hospital immediately and seek help or advice.

Platelets

These are the tiny fragments in your blood which clump together to form a clot to help stop bleeding and bruising. Your platelet count is normally between 150 to 400. Chemotherapy can make your platelet count fall.

If this happens you may notice that you;

- Bruise more easily
- Bleed more heavily or for longer from minor cuts or injuries
- Develop unexpected nose bleeds.
- Develop red or purple spots on your skin
- You may notice blood when passing urine, passing faeces or on toilet paper.
- Some ladies may develop a heavier periods during menstruation.

If you notice any of the above symptoms you must contact the hospital immediately and seek help or advice. If a blood count confirms that you have a low platelet count, there are a number of ways we can treat this. Firstly, your doctor may choose to wait for your blood counts to recover naturally in their own time. This can happen by allowing the bone marrow time to make more cells. Or, you may be offered a platelet transfusion. This is similar to a blood transfusion in the way it is given.

If you think or know that your platelet count is low we advise you to;

- Avoid activities that may increase your risk of injury.
- Use an electric razor rather than wet shaving with a blade.

- Wear protective clothing such as thick gloves when gardening or doing manual work to protect yourself from injury.
- Avoid contact sports and activities such as Rugby, Boxing and Karate etc.

White cells (Leukocytes)

White cells form part of your immune system and help your body to fight infection. There are different types of white cells, each having its own specific function. The normal white cell count in your blood is between 3 and 10. Following chemotherapy the number of white cells in your blood can fall significantly.

If this happens you will be at risk of picking up infections which your body may not be able to fight easily. You could become very ill and need to come into hospital for intravenous antibiotics if this does happen.

It is important that you are constantly on the look out for signs of infection and careful to prevent picking up infections while having chemotherapy. If you think that you have, or are developing an infection, acting quickly is important. You must contact the hospital immediately and seek help or advice.

Signs to look for and report immediately if you think you have an infection:

- A temperature of 37.5 or above and feel unwell
- Two temperatures of 37.5 (one hour apart) or a temperature of 38 c or above, with no other signs of infection and feel well
- Changes to your normal state of health, with or without a temperature
- Feeling extremely hot or cold
- Have unexplained episodes of shaking or shivering
- Have episodes of shaking or shivering especially after you central line has been flushed
- Have a productive cough
- Have a sore throat
- Have 'flu like' symptoms
- Have a burning sensation when passing urine
- Signs of infection in a wound

How do I reduce my risk of infection?

You may not know that your white blood count is low at times during your chemotherapy treatment. This is normal. Not all patients experience any adverse effects. People having chemotherapy are likely to have low blood counts between 7 to 14 days after their treatment. This can vary depending upon the treatment given. Your doctor or nurse will advise you about when your blood count is likely to be low.

There are several things that you can do to prevent picking up and infection when having chemotherapy treatment;

Buy a thermometer. One of the first signs of an infection is a temperature. Choose a thermometer that you are comfortable using and follow the manufacturer's instructions

on how to use it. If you have any concerns on using your thermometer please bring it with you to your “pre assessment” appointment and one of our nurses will show you how to use it. The normal body temperature varies among people. It may be an idea for you to check your temperature a few times during the day before starting treatment so that you know what your normal temperature is. It should be between 36c and 27c.

You do not have to check your temperature routinely while receiving chemotherapy unless you have been instructed to do so by you doctor or nurse for a specific reason. However, a number of people do check their temperatures on a regular basis for reassurance. If you become unwell and think you have an infection then we advise that you check your temperature and follow the instructions above.

If you come into contact with anyone who has contracted chicken pox, German measles, measles or shingles please inform your doctor or nurse immediately.

We advise you not to take any medication containing aspirin or paracetamol at this time. Both types of medication will reduce your body’s temperature. This can be very dangerous as it will mask symptoms and delay you from seeking help from medical and nursing staff. If your regularly take these medicines for another reason and think that you are becoming unwell or have an infection please inform someone that you do take the. This information may affect the care and treatment you receive.

Please avoid contact with anyone you think may have a cough, cold or other types of infection. This may be difficult if you live with that person. Do not panic. The chemotherapy nursing staff will give you useful information during your “pre assessment” appointment about what to do.

If you think or know that your blood count is low it is important to avoid crowded places where you may come in contact with someone with an infection. This does not mean that you should avoid going out and enjoying yourself. Places which are high risk include busy shopping areas, schools, hospitals, doctor’s surgeries and public transport especially at rush hour. Going swimming to a public pool or using a communal Jacuzzi also increases your risk of picking up infections from the water.

If you have a pet or are in contact with animals regularly you will need to be more careful. Avoid handling animal waste or wear gloves when emptying litter trays or cages. This should not stop you from stroking or fussing your pet as long as you thoroughly wash your hands afterwards.

If you know that your blood count is low you should be careful to avoid brick, mortar and cement dust as this may contain fungal spores which can cause an infection called aspergillus.

One of the best ways to avoid infections is to maintain a high standard of personal hygiene. It is important that you always remember to wash your hands when using the

toilet and before preparing and eating food. We advise you not to eat uncooked /raw foods when you think or know your white blood cells are low.

Will I be sick/nauseous?

Sickness or nausea and vomiting can sometimes occur after having chemotherapy. As we know this can happen with some chemotherapy drugs. Your doctor will give you anti-sickness medicines alongside your chemotherapy treatment to take during and after your treatment has been given.

It is important that if you feel or are sick, that you let us know immediately. There are lots of reasons why you may feel sick, so we will need to identify the reason and alter your medicines to suit you better. If you are actually being sick you can lose important fluids from your body and dehydrate very quickly. We would then need to alter your anti-sickness medicines and help you to replace the lost fluid by giving you fluid through a drip in hospital.

What can I do to help myself?

There are a number of ways you can help to control your sickness if it happens. Below is a list of self help tips:-

- Take your medication as instructed and let your doctor or nurse know if it is not working.
- Sipping clear, fizzy and/or cold drinks may help. Mineral water, ginger ale, lemonade and/or soda water are suggested. Try to avoid alcohol.
- Food preparation may make you feel sickly especially if it is hot food. Ask someone else to prepare your meals or try cold foods which do not smell strong.
- Avoid strong odours such as smoke, perfume or air fresheners.
- Avoid very sweet, heavy, stodgy, spicy and/or greasy foods.
- Try bland foods like dry toast, crackers, bread or savoury biscuits.
- Ginger biscuits are known to have natural anti-sickness properties, especially if eaten in the morning before you get up.
- Peppermints or peppermint tea may help.
- Eat light small meals throughout the day.
- Don't lie down after eating. Instead rest in a chair for a while after you have finished your meal.
- Try foods such as thin soups or egg custard, and then gradually introduce other more substantial foods.
- Avoid eating for a few hours before having chemotherapy if you usually feel sick during your treatment.
- Try to relax. Breathing deeply and slowly when you first feel sick may help.
- Attempt to distract yourself by listening to music, watching television or a film, or talk with your friends and family.

What about hair care and hair loss?

Hair loss can be a side effect of certain chemotherapy drugs. Like cancer cells, hair follicles are fast growing cells and therefore damaged quickly by chemotherapy drugs. Unlike cancer cells, normal hair cells quickly grow back once your chemotherapy treatment is over. For some people this can be the worst part of having chemotherapy.

Not all chemotherapy drugs cause hair loss and sometime this is hardly noticeable at all. In other cases hair loss may be partial or complete. Occasionally, you may notice eyebrows, eyelashes, body and pubic hair may also be lost.

If your hair is likely to fall out, you will notice it falling out within a few weeks of beginning treatment. For some people this can be sooner. There are a number of things which you can do to reduce the amount of damage caused to your hair and hopefully reduce the rate at which it falls out;

- If your hair is relatively long, ensure that it is cut to a shorter length. It will reduce the weight of your hair and be less shocking to you when your hair starts to fall out.
- Do not apply hair colouring or treatments such as perms to your hair for at least 8-12 weeks following treatment.
- Try not to over manage your hair by constant brushing or adding harmful hair products like hair sprays.
- Always use mild shampoos, and wherever possible reduce the number of times you wash your hair.
- Do not over heat your hair with heated rollers, curling tongs and hair dryers.
- Use soft brushes to brush your hair. Avoid combs and multi-bristled brushes.

If your hair does fall out there are a number of important things to remember.

Your scalp is always protected by hair and will be very sensitive to sunlight. Always wear a hat or sun block on your head if you are in the sun. In cold weather you will lose a large part of your body heat from your head. Always remember to cover up and prevent heat loss in this way. If your hair is at risk of falling out, your doctor or nurse will inform you of this. We will arrange an appointment for you to have a wig fitted if you so wish.

How should I look after my mouth?

Many people who have chemotherapy treatment are at risk of developing problems with their mouths. Because of this we have compiled some advice to help you prevent any mouth problems occurring.

It is important that you keep your mouth as clean as possible while having your chemotherapy treatment. This involves cleaning teeth and gums or denture plates mornings, evenings and ideally after each meal. Use a soft bristled toothbrush, as harder bristles will cause damage to your gums increasing the risk of soreness and damage. Some people find the effect of normal toothpastes very strong on their gums and prefer to use children's toothpastes as the taste is milder.

If your toothbrush is old, buy a new one. They can carry unseen bugs and infection. We recommend you change your toothbrush every three months.

We recommend that you avoid having any invasive dental work while undergoing chemotherapy treatment. This is because the risk of infection is very high. If you are thinking about having any dental work, please speak to your doctor or nurse beforehand. You may need to have a blood test to find out if your white blood cells are low. Also, your doctor may wish to start you on a course of antibiotics to reduce the chance of you getting an infection. If you need emergency dental work please inform your dentist that you are having chemotherapy.

Dry mouth

We advise you to use a mouthwash whenever possible. This will help to keep your mouth clean, fresh and moist during the day. Avoid using alcoholic based mouthwashes, though these may make your mouth feel fresh, the alcohol tends to cause dryness increasing the risk of problems.

We suggest using mouthwashes such as Sodabcarb, Chlorhexidine.

Sucking on sugar free boiled sweets and pastilles will help your mouth to produce saliva and increase your body's natural ability to keep your mouth moist and clean.

It has been found that sucking ice cubes during some chemotherapy treatments can reduce the risk of your mouth becoming sore. Please ask your chemotherapy nurse about this. He/she will advise you if this would be helpful in your case.

Sore mouth

If your mouth becomes sore or you develop ulcers, please let your doctor or nurse know immediately. It is important that we identify the reason for this soreness. It may be that it is due to the treatment itself, but it can easily be caused by an infection within the mouth which will require special care. Infections should be treated with specific drug treatments, which can be obtained from your doctor or nurse.

There are also special mouthwashes and preparations, which can be used to soothe soreness, such as Quadragel. These will need to be prescribed by a doctor or nurse. There are also topical treatments such as Bonjela or Teejel which can be bought from your chemist and applied to ulcerated areas within your mouth. Vaseline can be used to treat sore or dry lips.

Will my bowel habits alter?

You may experience changes to your bowel habits while having chemotherapy. You may become constipated or have diarrhoea. If you experience any of the following symptoms associated with your bowel habits you must report them immediately to your doctor or nurse.

These include:

- Not having your bowels opened for more than three days.
- Opening your bowels in excess of three times your normal bowel habit.
- If you have watery and/or smelly faeces
- Experiencing pain when opening your bowels.
- Your stomach becomes bloated or distended.
- You notice blood or pus in the toilet or on the tissue paper.
- You experience a loss of appetite.
- You start to be sick.

Constipation

This is where you find it difficult to open your bowels regularly. It can either mean that you open your bowels less frequently or find your faeces hard to pass when you eventually do.

Being familiar with your normal bowel habits may help you to know w if you are becoming constipated. Some people go to the toilet daily; others go more than this and some less than this. This is fine if your faeces are formed, brown in colour and easy to pass.

People who have a stoma following bowel surgery may notice that their bowel habits have changed. Knowing what is normal in this case it vital, so that you can notice any changes if they occur.

Constipation can come from eating low roughage/fibre foods, high amounts of starchy or fatty foods and/or a poor intake of fluids. Being less active and not exercising regularly can increase the risk of this happening. Finally, chemotherapy drugs like Temozolomide, Topotecan, Vinblastine, Vincristine, Vindesine and Vinorelbine are all known to cause constipation.

What can I do to help myself?

There are a number of ways you can help to prevent constipation. Below is a list of self help tips:-

- Try to increase your daily exercise (if possible). Increasing your activity helps to increase your bowels activity.
- Try to drink two litres of fluid per day.
- Try to drink warm drinks as the warmth stimulates the bowel into action.
- Increase the amount of roughage/fibre in your diet this includes; wholemeal bread, jacket potatoes, bran, muesli, fresh fruit and vegetables.
- Prunes and prune juice are a natural laxative.
- Natural orange juices also stimulate the bowel activity.
- Ask your doctor or nurse if you can take a medication laxative in addition to the advice above. Many laxatives are very gently and rarely cause urgency.

Diarrhoea

This is when you suddenly notice an increase in the number of times you need to go to the toilet. Your faeces become more loose, not formed and can even become watery. Diarrhoea can also be associated with colicky stomach cramping especially when you want to open your bowels.

We understand this is an unpleasant and embarrassing problem where you fear that you may not reach the toilet in time and that this can restrict your normal daily life.

Diarrhoea may occur for a number of reasons. The most common cause is chemotherapy and the medicines we use in association. Your doctor and nurse will inform you if you are receiving a chemotherapy drug that causes diarrhoea. They will also want to know immediately if you are having this side effect.

It is important to recognise that treatments such as antibiotics and radiotherapy can also cause diarrhoea. Being on chemotherapy can also increase your risk of infection. Developing diarrhoea unexpectedly may suggest that you have developed an infection. This is why it is important to tell your doctor and/or nurse.

If you chemotherapy drug is known to cause diarrhoea you will be given and/or advised to take anti-diarrhoea tablets by your doctor or nurse. They will explain when and how to take this medication safely. Do not take medicines that you have bought yourself “over the counter” without asking your doctor or nurse first.

Having diarrhoea can be dangerous if not stopped swiftly. If your diarrhoea has not stopped within 24 hours of starting to take your anti-diarrhoea medication you must contact your doctor or nurse immediately. By having diarrhoea you can lose important fluids from your body and dehydrate very quickly. If this happens we would need to help you replace the lost fluid by giving you fluid via a drip in hospital.

Episodes of diarrhoea “on” and “off” over a few days can be dangerous. If this occurs when your blood counts are likely to be low, this should be reported to your doctor or nurse immediately.

What can I do to help myself?

If you have diarrhoea follow the advice given below:

- Drink at least three litres of fluid per day. If you are unable to drink an adequate amount of fluid you must contact your doctor or nurse immediately.
- Take your anti-diarrhoea medication as prescribed. Many people wait, thinking that their diarrhoea will stop independently. Do not risk this, please take your medication.
- Avoid milk and mild based products as they are likely to make your diarrhoea worse.
- Avoid foods that stimulate the bowel such as high fibre, muesli, bran, pulses, fresh fruit and vegetables, nuts, seeds etc.
- Avoid caffeine based drinks like cola, tea and coffee.

- Avoid alcoholic drinks
- Avoid sweet and sugary foods especially chocolate.
- Try to eat low fibre foods such as white bread, white rice, noodles, creamed cereals, canned or cooked fruit without the skin.
- Eat white meats like fish, skinless chicken or turkey.
- Allow carbonated drinks to lose their fizz before drinking them.
- Avoid warm food and drinks which may increase your bowel action.
- If you are having accidents and soiling your clothing please let us know. You can get incontinence pads from your GP to help with this.

What changes can I expect to my kidneys?

Some of the drugs we use can irritate and/or damage your kidneys. This may affect your ability to produce urine. Producing urine is a very important function of your body, so it is important that you follow the instructions that your doctor or nurse will tell you about.

If you are having one of these drugs we will keep a very close eye on you. This may mean having regular blood tests called “kidney function” tests as part of your routine pre chemotherapy blood tests. This test is explained in more detail in our information leaflet “Having a blood test”.

Some doctors will ask you to have more detailed tests that measure how well your kidneys are working in a different way. This may involve you having to collect the amount of urine you produce for 24 hours and save it in a special container that we give you. This procedure will be fully explained to you if you are required to do it.

Or, you may be asked to attend our Medical Physics department in the hospital and have a test called an EDTA. This is where a solution is injected into your vein through a cannula (needle) and, at intervals, blood test are taken to monitor the levels of this solution in your blood. This will show how well your kidneys are working.

All of these tests will tell your doctor if it is safe for you to have or continue to have your chemotherapy. Sometimes your doctor may delay your treatment if your tests are low. However, we will discuss this with you.

How can I help to keep my kidneys healthy?

There are lots of things that you can do to help such as drinking lots of fluid. We recommend that you drink at least two litres (three to four pints) of fluid per day, every day.

Drinking water is the best type of fluid that you can drink. If you do not like the taste of water, try adding flavoured juices to water or drinking natural juices. Try not to drink lots of caffeine based drinks like cola drinks, coffee or tea. The caffeine content can irritate your bladder making it worse.

If you are having difficulty drinking two litres every day please let your doctor or nurse know. This is very important as there are things we need to do to help you.

What is cancer related tiredness (fatigue)?

You should expect to feel tired while having chemotherapy. You may find that you are able to carry on with your normal routine, or you may find your normal daily life more difficult to cope with. Fatigue can take some time to improve once your treatment has finished, so do not expect it to resolve as quickly as some other symptoms like sickness.

Here are some of the things that you can do to help with fatigue;

- Plan to do activities when you know you will have more energy.
- Rest between activities. Regular short breaks may be better than one long rest period.
- Short walks and light exercise may help. Before undertaking exercise please talk to your doctor.
- Small frequent meals and snacks may help. We can arrange for you to see a dietitian if necessary.
- Diversional tactics such as reading, music, games, hobbies etc can help you to relax.
- Listening to soothing, soft music such as a relaxation tape can help.
- If others offer help, accept! Let others do the ironing, shopping etc. or leave some things until you feel able to do them.

What is extravasation?

When you have chemotherapy through a vein, there is a small risk that the chemotherapy drug/s may leak into the surrounding tissues. If this happens it may cause a chemical burn to your skin. This is called extravasation.

The chemotherapy nursing staff are highly trained at putting in cannula's (needles). Even, so sometimes a cannula will move or be dislodged from the vein. This is more likely to happen if you are having your chemotherapy over a long period of time through a drip.

It is very important that;

- Your needle should feel comfortable at all times
- You should never feel burning, itching or any irritation while your needle is in place.
- You should never see redness, bruising or swelling around the needle site
- You should be able to see the needle and its dressing at all times. It should not be covered.
- If any of these things change you must tell the nurse looking after you immediately.

If we think some of your chemotherapy has leaked into the tissues, you will need emergency treatment to prevent further damage to your skin. Sometimes you may not experience any strange sensations while having your treatment, yet notice pain when at home. Please contact your doctor or nurse as soon as you experience any change.

What about my skin and nails?

Chemotherapy affects your skin and nails. We suggest that you pay close care and attention to your skin and nails while having treatment.

My nails

Your nails may become discoloured, brittle or break more easily than normal. You should keep your nails clean and moisturised at all times. You should also protect your nails from damage by wearing gloves when doing household chores, gardening or any task that involves getting your hands wet or dirty.

Wearing brightly coloured nail varnish can hide discoloured nails and strengthen them, lessening your chance of breaking them.

If you notice any redness, swelling, pain or changes to your nails or nail beds please tell your chemotherapy nurse or doctor. Picking up nail infections is common while on chemotherapy and should be treated immediately.

My skin

Some chemotherapy drugs can cause allergic reactions resulting in red and itchy skin rashes. You will be told if this applies to you. If you notice that you have an unusual rash on your skin you must inform your doctor or nurse immediately. Do not have another chemotherapy treatment without letting someone know!

Some people develop acne, patches or redness, itching, peeling, dry or cracked skin during treatment. There are lots of different creams and treatments which we can give for this. You must use the correct treatment for your condition. Inform your doctor or nurse if you develop any of these symptoms and they will advise you which treatment is right for you.

You may notice a change in the pigmentation (colour) of your skin, Do not be alarmed, the change is normally small. You may look like you have a sun tan when you have not been sunbathing. When your chemotherapy treatment has finished your skin tone goes back to its normal colour.

You may find that the change in pigmentation (colour) affects parts of your skin independently. Nail beds, the skin over joints, pressure points, fingers, palms of the hands, soles of the feet and along veins can become more visible. If you find this unsightly and feel this affects how you see yourself, try wearing longer sleeves and carefully chosen clothing to help hide this. Once your treatment is finished your skin tone will go back to its normal colour.

What is hand and foot syndrome?

A few specific chemotherapy drugs such as 5FU, Capecitabine and Caelyx can cause very dry skin on your hands and feet. This can lead to your skin flaking, peeling and cracking. The palms of your hands and the soles of your feet appear very red and in some cases can become sore. In severe cases, the skin on your hands and feet can peel and blister, significantly increasing your risk of infection.

There are a number of self help tips you can do to lessen your risk of developing this symptom as well as control the effects if they occur;

- Keep your hands and feet clean and dry at all times.
- Keep your hands and feet cool at all times. Heat can increase the effects of this symptom significantly.
- Wear properly fitted socks and shoes to prevent unnecessary damage to your feet.
- Wear gloves when doing household chores to reduce your exposure to detergent or household cleaning products that may strip the natural oils from your skin.
- Apply moisturising creams to your hands and feet regularly especially after they have been in water.
- If you do develop this condition your doctor may start you on a course of medication called pyridoxine which is a natural vitamin that your body needs to keep your skin healthy.
- Remember to tell your doctor or nurse about this side effect as we may need to alter the dose of the drug or stop it if your symptoms get worse.

What is radiation recall?

Some chemotherapy drugs such as Doxorubicin, Epirubicin, 5FU, Methotrexate, Cyclophosphamide and Bleomycin can increase the risk of your skin having a reaction if you are also having radiotherapy.

Your skin may become more red, itchy and dry like a severe skin burn. These reactions may occur if these drugs are given before, during or after radiotherapy treatments. This is called a radiation recall reaction. If you are having radiotherapy and you notice your skin is becoming red and uncomfortable please report this immediately to your doctor or nurse.

These reactions can last from hours to several days. Your radiographer, doctor or nurse will advise you how to manage this condition.

What should I do if I take 'steroid' medication?

Steroids are types of hormones that are produced naturally within the body. There are many different kinds, all having powerful effects. For this reason, they have been found to be very useful in making some cancer treatments more effective.

We also use steroids to treat trouble some symptoms like pain, sickness and loss of appetite. They may also help to reduce inflammation within the body, when caused by injury or cancer growth.

Common types of steroids used with cancer treatments are hydrocortisone, dexamethasone, methylprednisolone and prednisolone.

General advice when taking steroids;

- Your steroid tablets should be taken with or after food as they can cause indigestion type problems and if allowed, damage the stomach lining.
- You may notice that taking steroids affects your sleep patterns keeping you awake. We advise that you take your steroids during the first half of the day and not after 4pm.
- If taken for longer than three weeks, you will usually be given a steroid card. The card contains details of your prescriber, type of steroid, dose taken and the duration of the treatment. It should act as a reminder that your medication should not be stopped suddenly and to provide information about you treatment in case of an accident. You should carry it with you at all times and show it to anyone who treats you (e.g. doctor, nurse, pharmacist, and dentist).
- If you are taking steroids long term, your doctor may need to temporarily increase your dose if you experience any additional illness, injuries or need surgery during treatment. Please discuss this with your doctor.
- You should not stop taking your medication suddenly, particularly if you have been taking it for longer than three weeks. This is because long term use of these drugs slow down the natural production of the body's own steroids called corticosteroids. When it is time to stop treatment the dose should be lessened slowly, to allow the body to start producing adequate amounts of natural steroids again.
- Your medicine may reduce your ability to fight infections. Contact your doctor if you think that you have an infection during treatment.

What advice should I follow about my diet?

People having treatment for cancer should try to eat a well balanced diet to help their body to recover from the trauma of the treatment. If you have a low white cell count (neutropenia), as a result of your chemotherapy treatment, you will need to be particularly careful about food safety. We suggest you read our leaflet called "Advice about what you can eat when your neutrophil count is low".

A well balanced diet includes;

- A wide variety of different foods
- Plenty of fruit and vegetables
- Protein foods, like meat, poultry, fish, dairy products, eggs, beans and pulses (e.g. lentils), nuts and vegetable protein foods like Soya bean curd)
- Starchy foods, like potatoes, yam bread, chapattis, pasta, rice, breakfast cereals and other cereal foods.

- At least eight to ten cups of non alcoholic fluids a day. You may need to have more if/when receiving chemotherapy treatment.

We do not routinely advise people having chemotherapy to attempt to lose weight or diet. However, eating healthy is always sensible; therefore cutting down on foods high in fat and sugar is advisable. If you are losing weight or your appetite has fallen, eating more foods high in fat and sugar may help you to get the calories your body needs.

Foods high in fat

- Fried foods (including chips)
- Fatty meats, burgers and sausages
- Cakes and biscuits
- Chocolate and toffee
- Full fat dairy products, like whole milk, cheese, butter and cream
- Crisps, nuts and scratchings
- Take-away food
- Pastry

Foods high in sugar

- Most puddings and deserts
- Fatty meats, burgers and sausages
- Soft drinks

Alcohol

If you want a drink, check with your doctor or nurse first that it is all right to have along with your treatment and any other medications

Only drink in moderation. The recommended limits (for the general population) are;

Men 28 units/week

Women 21 units/week

Example of one unit;

Half pint ordinary strength beer or lager

1 glass of wine

1 measure of spirits

Finally

If you are in any doubt about what you should or should not eat, please do not hesitate to speak to your doctor or nurse. We can also arrange for you to speak to a dietitian who can give you specialist advice about your diet.

What will happen to the taste of food and drink?

Chemotherapy can affect your taste buds and alter the flavours that you normally taste. This may affect your normal pleasure of eating. However, when you complete your treatment you can expect that your normal taste will fully return. While it lasts;

- Avoid foods that taste unpleasant and try foods with different tastes.
- If sweet food tastes too sweet, try savoury foods such as soups, cheesy biscuits and flavoured crisps.
- Sharp ‘acidic’ foods such as lemon, grapefruit and pineapple have a strong flavour. Try these foods in their original form, or as flavouring e.g. lemon sorbet, citrus flavoured ice –lollies.
- Highly flavoured foods may be useful.
- If you cannot eat red meat, try eggs, fish, chicken, baked beans and peanuts.
- Avoid tea and coffee if it tastes unpleasant. Try fruit juices or herbal tea. Milky drinks are a good source of calories.
- If foods have less flavour, use condensed soups or rich sauces with meat or fish
- Experiment with foods you have not tasted before. You will have less expectation of what it will taste like and are more likely to accept its flavour.
- Sucking boiled sweets and peppermints between meals may help.

If you are not able to eat much, as a result of taste changes, and you are losing weight, it is important you see a dietician. They will be able to advise you further. Ask a member of the nursing team caring for you to refer you.

What advice should I follow about sex and fertility?

Not all chemotherapy causes infertility but there are some chemotherapy drugs which do. This infertility or the inability to produce children naturally may be temporary or permanent depending upon the drugs you are given.

Your doctor and/or nurse will discuss this risk fully with you before you start treatment especially if you are planning to have children in the future. It is also important to involve your partner in these discussions and to discuss your feelings together.

It is possible for women having chemotherapy or the female partner of a man having chemotherapy to become pregnant during treatment. You must not get pregnant when having chemotherapy as the drugs may seriously affect the unborn baby. You should discuss contraception with your doctor or nurse. Barrier methods of contraception are usually recommended, i.e. the cap or condom. The contraceptive pill could possibly interfere with your treatment and chemotherapy treatment may stop the pill being effective.

Advice for women

Chemotherapy drugs can affect your ovaries and stop egg production. If this happens you may find that your monthly periods become irregular and occasionally stop completely. You may experience ‘hot flushes’, dry skin and dryness of the vagina as if you were experiencing the menopause. If infertility is temporary your periods will return to normal once your treatment has finished.

If you are pregnant at the time your cancer is diagnosed it is important to discuss with your doctor whether or not to continue with your pregnancy. It might be possible to

delay starting treatment until after the baby is born. You will need to discuss this with your doctor.

Advice for men

Chemotherapy drugs can sometimes have a permanent effect on your ability to produce sperm, which could affect your ability to father children. However, chemotherapy does not usually have a permanent effect on your sexual performance or ability to enjoy sex. Temporary impotence may occur but this is usually short-lived.

What is peripheral neuropathy?

Peripheral neuropathy is a specific side effect of some chemotherapy drugs. It occurs when nerves within the body become irradiated and eventually damaged.

The first sign that you might have peripheral neuropathy is a tingling or prickling in your toes, although it can start in your fingers.

If not treated, this tingling may gradually spread to your feet and/or hands and become numbness. You may then experience difficulty walking, and moving around.

These sensations may come and go, or remain constantly. Sometimes you may not notice them, whilst at other times you may find them extremely troublesome.

The symptoms of peripheral neuropathy usually occur in the feet and/or hands and are as follows;

- Numbness or insensitivity to pain or temperature
- Extreme sensitivity to touch
- Tingling, prickling or burning sensation
- Loss of balance or coordination
- Muscle weakness

What drugs cause peripheral neuropathy?

There are certain drugs that are known to cause this symptom. Your doctor or nurse caring for you will tell you if you are about to receive one of these drugs.

However, drugs like Cisplatin, Carboplatin, Etoposide (rare), Gemcitabine (rare), Taxol, Taxotere, Thalidomide, Velcade, Vincristine, Vinblastine, Vindesine, and Vinorelbine are all known to cause this effect.

What should I do if I have any of these symptoms?

It is very important that you report any of these symptoms to your doctor or nurse the next time you attend for an appointment. We would like to know before we give you your next treatment.

It is very important that you do not ignore or forget to tell us about any symptoms that have resolved on their own.

How can I help myself?

Avoid ill fitting shoes

Wear comfortable, well fitting trainers instead of shoes. Shoes that are too tight can cause rubbing, and cramping. Shoes that are too loose can damage your feet, causing pain and may not provide enough support.

Trainers are sturdy enough to provide support, yet flexible enough to provide your feet with the space they need to remain comfortable. If you need something a bit more formal, whether it be for work or going out at night, we suggest that you invest in a good pair of leather shoes, and to work closely with a knowledgeable salesperson who can work around the specific types of pain you are dealing with.

Keep your feet and hands cool

Symptoms of peripheral neuropathy can worsen during the warm summer months or at night, when your feet are tucked away under sheets or blankets. Let your feet breathe! If at all possible, don't wear suffocating shoes around the house – opt for a comfortable pair of socks or some soft slippers.

Don't cover your feet at night. Cool air in your bedroom can have a numbing effect on your feet. This will help keep your feet (and hands) free of sheets and blankets, which you may sometimes find painful.

Treat your feet and hands well

Massaging your hands or feet – or having someone massage them for you – can be relaxing and can increase circulation. Massage can also help release endorphins (chemicals produced by the body to help control pain). You could also try soaking your hands and feet in cold water if they are painful

Where can I get more information?

If you have any questions or concerns about your treatment, please speak to your doctor or chemotherapy nursing team.