

Contacts

If you are unable to keep any appointments, or have any questions concerning your appointment, please telephone the Wellington Blood & Cancer Centre as soon as possible.

Radiation Treatment Department
Level 2
Wellington Blood & Cancer Centre
Wellington Regional Hospital
Private Bag 7902
Riddiford St
Newtown

Telephone: 04 806 2000

Monday - Friday: 8am – 4:30pm

**For after hours emergencies, contact
04 385 5999, and ask for Ward 5 North ext 80500**

Advice for Patients Receiving Temozolomide and Radiation Treatment to the

Brain

Radiation Treatment Department

Wellington Blood and Cancer Centre

Introduction

This information is to inform you and those close to you about caring for yourself during treatment. When having radiation therapy to the brain and taking temozolomide chemotherapy, you may experience skin reactions and hair loss. Tiredness, nausea or headache may sometimes occur. Some of these reactions build up slowly over the course of treatment or develop after completion of treatment. Depending on individuals, headache or nausea may occur within the first one or two treatments. It can be hard to know if these symptoms are due to the Radiation treatment or the Temozolomide. Your treatment team will help you manage these side effects. It is important to note that reactions differ between people.

This booklet also has some information about the chemotherapy drug the doctor has prescribed for you called Temozolomide (pronounced TEM oh ZOL oh mide) It looks at some of the possible side effects of the drug including risk of infection, bruising, bleeding, diarrhoea, constipation and fatigue.

We believe you should know what to look out for. You may want to show this booklet to your support person so they also have an understanding of your treatment.

It is sometimes a good idea to write down any problems or questions you might have over this time. You can then discuss these with your doctor or treatment team next time you see them.

Taste changes

You may notice that food tastes different. Normal taste usually comes back after treatment finishes.

Raised blood sugar

If you are on dexamethasone as part of your treatment it may cause a temporary increase in the level of sugar in your blood. Some signs of a raised blood sugar level are feeling thirsty, needing to pass urine more often and feeling hungry. If you get any of these let your doctor or nurse know.

Fertility

Temozolomide damages fertility. It may also cause birth defects. It should not be taken by anyone who may be pregnant. Precautions should be taken to avoid becoming pregnant or fathering a child during and for 6 months following treatment. Barrier contraception is recommended.

Support Services

Please ask a member of your treatment team if you would like more information or to access any of these services.

- Cancer Society
- Counselling (general / relationship / sexual issues)
- Social work
- For female patients “Look Good Feel Better”
www.lgfb.co.nz
- Massage
- Fit for Life
- Chaplains
- Wigs

Contact the hospital straight away if:

- your temperature goes above 38°C (100.4°F)
- you suddenly feel unwell, even with a normal temperature.

DO NOT delay as an infection could be life threatening.

Your blood cell count will be monitored throughout the course of treatment to make sure the number of white blood cells doesn't get too low.

Bruising and bleeding

Temozolomide can reduce the production of platelets, which help the blood to clot. Tell your doctor if you have any unexplained bruising or bleeding.

Anaemia

Temozolomide can reduce the number of red blood cells. A low red blood cell count is called anaemia. This may make you feel tired or breathless. Tell your treatment team if you have these symptoms

Diarrhoea

Temozolomide can cause diarrhoea. You may be given medication for this by the doctor. It's important to drink plenty of fluids if you have diarrhoea.

Constipation

You are likely to get constipated due to side effects of ondansetron (given to prevent nausea). This can usually be helped by drinking plenty of fluids, eating more fibre and doing some gentle exercise. You may need to take medicine (laxatives) to help.

Loss of appetite

Some people lose their appetite while they're having chemotherapy. Please let your treatment team know if this is a problem.

Skin

During your radiation treatment you are likely to experience a skin reaction on your head. Reactions may include skin becoming pink or red, dry and flaky, warm and itchy, or sore and sensitive.

These reactions are normal and the severity of the reaction differs from person to person.

Temozolomide can also cause a skin reaction or rash all over your body. If this occurs let your treatment team know.

Hair Loss

Radiation treatment to the head can cause temporary or permanent hair loss in the area being treated. Rarely temozolomide can affect any of the hair on your body. Hair loss can occur a couple of weeks after treatment has started, and is a gradual process over a few days.

Hair re-growth after treatment depends on the dose of radiation given. It can take up to 6 - 12 months to re-grow and may be patchy for a while. After treatment your hair may be a different texture or colour.

Staff can advise you regarding further information on obtaining a wig, tying scarves and where to get turbans. If you would like your wig to be similar to your current hairstyle then it is a good idea to see the wig consultant while you still have your hair so they can match it as closely as possible.

Skin and Hair Care Advice**Do**

Ask the treatment team which area on your head we are treating. Use a simple moisturiser such as HealthE fatty

cream OR a moisturiser you are not allergic to apply on the treated area after your hair has fallen out. Do this at least twice a day.

- Wash your hair using a mild shampoo e.g. Baby shampoo

Do Not

- Expose the treated area to direct sunlight – wear a hat, scarf or wig.
- Expose the treated area to excessive heat e.g. hair dryers, straighteners or hair rollers.
- Use any hair colourants or products that contain bleach, alcohol, lacquer or other harsh chemicals.

Nausea and Vomiting

Some people may experience nausea and vomiting from the temozolomide or the radiation treatment. Your doctor has prescribed you anti-sickness medication to take before your temozolomide each day. It is important to take these as directed, even if you don't feel sick.

There are a number of things you can do to minimise nausea:

- Avoid food with strong smells. Often cold food is better for this.
- Avoid fatty fried foods, spicy and very sweet foods.
- Eat small meals often, rather than three large meals.
- Some people find that ginger and peppermint flavours helps nausea.
- Drink plenty of fluids – small amounts regularly may be easier

Part 2 – After Radiation Treatment

You will start taking your temozolomide every day for 5 days. Then you will have a break for 23 days. This is one cycle of temozolomide

The table below will help you remember what you need to do on week one. 5 days of temozolomide then stop for 23 days

Drug	M	T	W	T	F	S	S
Anti Sickness (time - when you wake up)							
Temozolomide (1 hour after anti sickness)							
Steroid							

If you have any questions about how to take you medication please ask a member of your treatment team.

Side Effects of Temozolomide

Each person's reaction to chemotherapy is different. Some people have very few side effects while others may experience more. The side effects described below won't affect everyone who has temozolomide.

Risk of infection

Temozolomide can reduce the number of white blood cells, which help fight infection. White blood cells are produced by the bone marrow. If the number of your white blood cells is low you'll be more prone to infections. A low white blood cell count is called neutropenia.

You may have headaches, aching muscles, cough, sore throat, pain when passing urine or feel cold and shivery.

During Radiation Treatment

Part 1 – During Radiation Treatment

This is the first part of your treatment with Temozolomide. It happens while you are having radiation treatment. It can be a little bit confusing as there are lots of different drugs and lots of different times you will need to take them. It can be helpful to ask the pharmacist to put the drugs into a blister pack to help you remember what needs to be taken when.

The table below is to help you remember.

Drug	M	T	W	T	F	S	S
Ondansetron (Anti Sickness) Time: when you wake up							
Temozolomide Time: 1 hour after anti-sickness							
Laxol (if needed) (Laxative)							
Radiation Treatment							
Cotrimoxazole (Antibiotic)							
Steroid (if needed)							
Anti-convulsant (if needed)							

Guide

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After Treatment

Four week break

After you have completed your radiation treatment you will have a break from taking temozolomide for 4 weeks. You will see the doctor 3-4 weeks after treatment and they will go through part 2 with you

If you have been sick:

- **DO NOT** take another Temozolomide tablet within the same day.
- Sometimes sucking icecubes or sipping clear fluids can help.

Seizures

Let your treatment staff know if you have experienced any different sensations or seizures.

Headache or Dizziness

If you are experiencing headaches or dizziness please let the treatment team know so they can offer you further advice. You may need to see the Doctor so they can assess the medication you are taking.

Tiredness/Fatigue

Some people experience tiredness/fatigue towards the end of their treatment. This can be caused by a number of factors such as travelling to and from treatment each day, change in routine, anxiety about treatment and the chemotherapy or radiation treatment itself. If you are having difficulties sleeping then mention this at your weekly review.

Driving

You must not drive a motor vehicle. Do not operate heavy machinery unless your doctor has given you permission to do so. Everyone who requires radiation therapy for a high grade brain tumour is **NOT PERMITTED** to drive.

Temozolomide

Temozolomide is an oral chemotherapy drug which interferes with the growth of cancer cells. It is used together with radiation therapy to treat certain types of brain tumor in adults.

Before Taking Temozolomide

You should not take temozolomide if you have had an allergic reaction to Dacarbazine, a treatment for different cancers. If you have had an allergic reaction before to this drug be sure to tell your doctor before you take temozolomide.

How does it work?

Temozolomide is absorbed from the gut and is transported by the blood where it converts into an active form. It gets into the brain where it attacks cancer cells. Temozolomide works directly on the DNA in the cells in your body. DNA controls the growth of normal cells as well as brain tumour cells. Because tumour cells grow differently from normal cells they are affected to a much greater extent by the effects of the temozolomide.

How do I take Temozolomide?

The capsules should be swallowed whole with plenty of water. They should not be opened or chewed. You should take the capsules at the same time every day on an empty stomach, either an hour before or two hours after food. It's important to make sure you take the capsules exactly as you have been directed by your doctor.

What should I do if I take too many capsules?

If you take too many capsules contact the hospital immediately.

What should I do if I miss a dose?

Take it as soon as you remember unless a whole day has gone by. If it has, then check with your doctor but do not take a double dose unless told to by your doctor.

What should I do if a capsule gets damaged?

If a capsule gets damaged it is very important to avoid breathing in the powder or letting it have contact with your skin, eyes or nose. Call the hospital and ask what to do with the capsule before clearing up.

Your dose depends on your height and weight. The number of cycles you have will depend on how well you respond to temozolomide and how much it affects you.

Temozolomide Treatment Management

There are two parts to the Temozolomide treatment. The first part is while you are having your Radiation Treatment. Then there is a four week gap. Then you will start part two of your treatment.

Once you start taking your temozolomide, you take it everyday including weekends and public holidays until your last day of radiation treatment OR until your Dr tells you to stop.