
Cancer treatments - chemotherapy

Summary

- Chemotherapy drugs may take the form of tablets, or injections given by drip directly into a vein.
 - It is important to remember that almost all side effects will disappear once your chemotherapy treatment is completed.
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Chemotherapy is the use of drugs to destroy cancer cells. Chemotherapy drugs used in the treatment of cancer may be taken as tablets or, more commonly, given by intravenous drip directly into a vein.

Many different drugs are available, which generally work by killing or slowing the growth of fast-growing cells. Cancers are made up of fast-growing cells. Other fast-growing cells, such as the cells that make up hair follicles, are also affected. This is why one of the side effects of chemotherapy is hair loss. Chemotherapy medications are also known as cytotoxic or anti-cancer medications.

Different uses of chemotherapy

Depending on individual factors such as the type of cancer, where it is and the person's age and general health, chemotherapy may be used:

- As the only form of treatment
- Together with radiotherapy
- Before surgery to shrink the tumour
- After surgery to kill off any remaining cancer cells.

Aims of chemotherapy

The major aims of chemotherapy are to:

- Cure the cancer or increase the chance of cure
- Reduce symptoms and improve quality of life
- Improve survival.

Where chemotherapy is given

Chemotherapy can be given to you as an inpatient (involving an overnight stay in hospital) or, more commonly, as an outpatient (day visit). Your doctor may prescribe one or more drugs depending on the location, type and stage of the cancer. For example, a typical chemotherapy schedule for the treatment of breast cancer includes three different chemotherapy drugs.

What chemotherapy feels like

Having chemotherapy should be painless. You may have a cool feeling as the chemotherapy goes into a vein, because the fluid is cooler than the temperature of the blood in your body.

How chemotherapy is given to you

The way chemotherapy is given depends on individual factors but may include:

- Injection into a vein (intravenous)
- Oral tablets or capsules.

Very rarely chemotherapy may be given by injection into:

- The skin (subcutaneous)

- The spinal fluid (intrathecal)
- The chest cavity (intrapleural)
- The abdominal cavity (intraperitoneal)
- An artery.

Methods of intravenous treatment

Chemotherapy is usually given intravenously, which means the drug or drugs are delivered into a vein. Different methods of administering intravenous chemotherapy include:

- **Cannula** – this is a thin plastic tube about 1.5cm long that is inserted into a vein in your arm or hand. The drug or drugs are given through an intravenous drip attached to the cannula. The cannula is removed once the drugs have been given.
- **Central line** – this may also be called a Hickman line, a peripherally inserted central catheter (PICC) or a 'port'. It is a semi-permanent 'drip' that goes into a large vein near the heart and can stay in for several months if necessary. These lines may be put in place, under local anaesthetic, while you are in the x-ray department (radiology), or in an operating theatre under a general anaesthetic. A central line can be used to take blood, as well as to give chemotherapy. Central lines may be used if:
 - You need chemotherapy continuously (for example, 24 hours a day, using a small portable pump)
 - You are likely to need chemotherapy for a long time
 - The chemotherapy might damage small veins
 - It is difficult to put a cannula into your veins.

The central line is removed once your chemotherapy treatment is completed.

Chemotherapy and other drugs

Your doctor may advise you to avoid taking some other medications while you are having a chemotherapy treatment cycle. This may include prescription as well as over-the-counter medicines, vitamins and herbal and natural remedies.

It's best to discuss all medications and supplements with your doctor. Some preparations may reduce the effectiveness of chemotherapy or may increase the risk of side effects.

Side effects of chemotherapy

Not everyone experiences side effects. Side effects depend on the type of drug or drugs administered, the dose and frequency of treatment and on individual factors. Side effects can be mild or may be quite severe. It is important to discuss side effects with your doctor or chemotherapy nurses.

Side effects can be treated and there are also things that you can do to try to prevent or manage side effects. If side effects are severe, it may be necessary to have a break from treatment, to have a reduced dose, to change treatment or to stop all treatment. Common side effects include:

- Fatigue
- Loss of appetite
- Nausea
- Vomiting
- Bowel changes such as diarrhoea or constipation
- Hair loss (called alopecia)
- Infection
- Reduced levels of red and white blood cells and platelets
- Mouth ulcers or mouth infections
- Skin problems such as itchiness or extreme light sensitivity.

Coping with side effects

It is important to remember that almost all side effects will disappear once your chemotherapy treatment is

completed. Discuss any side effects and preventative strategies with your doctor or chemotherapy nurse. Helpful strategies may include:

- Drink plenty of water in the days after your chemotherapy treatment.
- Exercise gently whenever possible.
- Plan your activities for times when you know you'll feel the most energetic, perhaps in the mornings. Take afternoon naps if necessary.
- Eat a healthy diet with plenty of fresh fruit, vegetables, lean meats, wholegrain cereals and low fat dairy products. Avoid high fat, spicy or rich foods.
- Eat when you feel hungry. You may need to experiment and change your eating habits – for example, you may prefer to have your main meal in the morning. It may help to snack lightly throughout the day rather than stick to three main meals.
- Treat your hair gently. Use mild shampoos. Avoid harsh hair treatments such as dyes, perms, hair rollers, gels and sprays.
- Try satin, cotton or polyester pillowcases, which may feel more comfortable against your scalp.
- Use wigs, scarves, hats or turbans to cover up hair loss.
- Avoid people who have obvious infections such as colds or the flu, although there is no need to avoid people in general or to avoid crowded areas.
- Wash your hands with soap after going to the toilet, before preparing food and before eating to reduce the risk of ingesting infection-causing germs.
- Be extra careful around sharp implements because chemotherapy may make it harder for your blood to clot. For example, wear gloves when working in the garden and consider using an electric shaver instead of razor blades.
- Pay close attention to oral hygiene. Brush your teeth at least twice a day. Rinse your mouth with salt water at least four times every day to reduce the risk of mouth problems.
- Use any mouthwash your doctor may give you as prescribed. These special mouthwashes reduce the risk of infections or ulcers. Avoid over-the-counter mouthwashes unless your doctor thinks they are okay.
- Avoid hard or crunchy foods if you have a mouth infection. Try eating soups and soft, wet foods such as stews or icecream.
- Avoid sun exposure. If outside, wear protective clothing (such as a broad-brimmed hat and a long-sleeved top) and apply sunblock (SPF30+) to exposed skin.
- Moisturising lotions (such as sorbolene) can help reduce skin itchiness.
- Avoid over-the-counter drugs, natural therapies or any other type of supplement unless your doctor says that it is okay to take them.
- Seek help if you feel depressed or anxious. See your doctor for advice and referral if talking out your feelings with family and friends doesn't make you feel any better.

Regular tests during chemotherapy

You will have regular blood tests during chemotherapy to make sure that it is safe to continue with treatment. You may also have scans, such as CT scans, to see how well the chemotherapy is working.

Report to your doctor

You should notify your doctor (or chemotherapy centre) at once if you have any of the following:

- Fever higher than 38 °C
- Chills or sweats
- Abnormal bruising
- Abnormal bleeding
- Continuous vomiting
- Severe diarrhoea or constipation
- Abdominal pain
- Feeling suddenly unwell in any way.

If you can't contact your doctor or the hospital, go to the emergency department of your nearest hospital. Tell the staff that you are having chemotherapy.

Where to get help

- Your doctor
- The Cancer Helpline Tel. 13 11 20
- Palliative Care Victoria Tel. (03) 9662 9644
- The Australian Survivorship and Information Centre Tel. (03) 9656 3754

Things to remember

- Chemotherapy is the use of drugs to destroy cancer cells.
- Chemotherapy drugs may take the form of tablets, or injections given by drip directly into a vein.
- It is important to remember that almost all side effects will disappear once your chemotherapy treatment is completed.

This page has been produced in consultation with and approved by:

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