



SATAKUNNAN SAIRAANHOITOPIIRI
-kumppanuudella terveyttä ja toimintakykyä-

Instructions to cancer patients during chemotherapy treatment (oncology)



Contents

Chemotherapy treatment	3
The most common side effects of chemotherapy	4
Blood test monitoring	5
Changes in blood values	5
Fever	6
Nausea and vomiting	6
Problems with skin and mucosa	8
Diarrhoea	11
Constipation	12
Hair loss	13
Tiredness and fatigue	13
Hormonal function	13
Sexuality	14
Other side effects	14
Living with your illness	14
Handling secretions after chemotherapy	15
When to contact the Oncology Outpatient Clinic or A&E	15
Contact information	16

©

Authors: Katja Lehtoranta, Tuula Laurila and Minna Grönman

Contents inspected by Maija-Leena Murashev, Chief Physician

04/2016

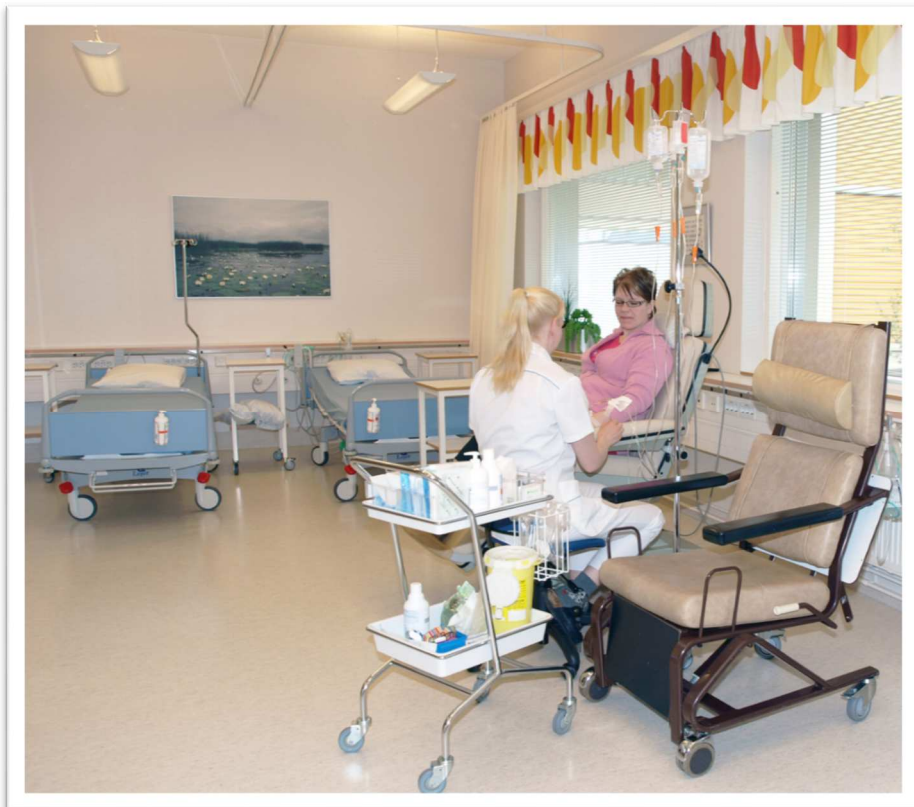
The purpose of this guide is to provide information about chemotherapy treatment, the side effects it may cause, and how to alleviate them at home.

Chemotherapy treatment

Chemotherapy drugs (cytostatics) are medicines used to treat cancer. Cytostatic drugs prevent the growth and division of cancer cells. Chemotherapy treatment may be given before or after surgery, or to boost radiotherapy. In advanced cancer, chemotherapy is used to stop and slow down the spread of cancer.

Cytostatic drugs are transported to different parts of the body via the circulation. They may also affect healthy cells, causing side effects. The effect of the drugs is targeted especially at rapidly dividing cells, such as blood-forming cells in the bone marrow (white and red blood cells and platelets) and mucosal cells. Not all patients get side effects, however. **It is important to tell the healthcare staff of any side effects and any changes in your health status after the treatment.**

Treatment is tailored individually for each patient. It may consist of one or several cytostatic drugs. Chemotherapy may be given as an intravenous infusion or as tablets/capsules given by mouth. If you are given intravenous chemotherapy, you will have a cannula ("drip") inserted into a vein in your hand. The cannula is removed once the treatment has been completed. You may sit up in a chair or lie in bed while receiving treatment. You can also move about, for example go to the toilet.



The chemotherapy treatment room

There is a refrigerator in the chemotherapy room that contains sandwiches/pasties and beverages that you can eat and drink. If you like, you can also bring something to eat when you come in for your treatment. Patients are treated as outpatients at the Oncology Outpatient Clinic. This means that you can go home once you have received your treatment.

The most common side effects of chemotherapy

The side effects of chemotherapy vary, depending on the drug given. The incidence and severity of side effects varies between individuals. It is impossible to predict in advance whether you will have side effects and what they will be like. As a rule, the side effects will have alleviated before starting a new treatment cycle.

Blood test monitoring

Your blood test results will be checked before every treatment or cycle of treatment, usually on the day before. You can go to your own health centre, Rauma Regional Hospital or the laboratory at Satakunta Central Hospital for the blood tests. The blood tests should be taken in the morning. Nearly all laboratories have an appointment system where you can make an appointment, either by phone or online. You may eat breakfast before giving a blood sample, unless you have been told otherwise.

If your blood test results are abnormal and your treatment needs to be postponed, you will be informed by phone, usually on the weekday before your treatment appointment. When calling you, we will block the calling number, so "Unknown number calling" may be displayed on your mobile phone. We hope that you will answer these calls.

Changes in blood values

White blood cells are an important part of the normal defence system against infections in humans. Cytostatic agents affect the function of the bone marrow by reducing the number of white blood cells (leucocytes and neutrophils). The risk of infection increases as the number of white blood cells decreases. The number of cells is at its lowest 1–2 weeks after treatment. Because of the risk of infection, you should be extra careful with hand hygiene.

The reduction in your haemoglobin level leads to poor transportation of oxygen to different parts of the body, which may result in breathlessness and fatigue. Taking iron supplements rarely brings any relief, however. A strong reduction in the amount of

platelets may increase the risk of bleeding. Possible symptoms may include bleeding from the nose or gums, blood in the urine and bruising.

Fever

If you develop a **fever above 38°C** or if your temperature is slightly elevated for a few days, or if you have other signs of infection, you should **go to A&E (Accident & Emergency) at Satakunta Central Hospital or Rauma Regional Hospital.**

If the Oncology Outpatient Clinic is open, you can first call the Outpatient Clinic nurse, who will inform the staff at A&E. While at A&E, inform the healthcare staff when you received chemotherapy. If you are prescribed antibiotics for an infection, you should contact the Oncology Outpatient Clinic nurse, preferably before your next doctor's appointment and/or scheduled treatment. The treatment may have to be postponed because of the antibiotics. If you become ill (e.g. with a stomach flu or flu) a few days before or on the day you are scheduled to receive treatment, call the Oncology Outpatient Clinic. They will assess whether it is possible to go ahead with the treatment.

Nausea and vomiting

Nausea is the most common side effect of cytostatics. Before coming to the treatment, you do not have to take any medication at home to prevent the nausea. You will be given anti-nausea medication at the Outpatient Clinic every time before receiving chemotherapy. The nausea is usually at its worst 1–5 days after chemotherapy.

The doctor has prescribed two anti-nausea drugs for you: Primperan® 10mg tablets and Granisetron®/Ondansetron® tablets. We recommend that you get the Primperan tablets from the pharmacy before your first chemotherapy appointment.

Instructions for nausea

- If you start to feel nauseous after receiving treatment, you should **immediately** take a **Primperan® tablet**. Take 1 tablet as needed, 1–3 times a day. Do not take more than 3 tablets a day.
- If the nausea is not alleviated by 3 Primperan® tablets a day, go to a pharmacy to get the Grani-setron®/Ondansetron® tablets and take them as prescribed. Granisetron® may be used in addition to Primperan® tablets.
- As a side effect, Primperan® causes some people to feel "restless and strange". If you experience this side effect, you should stop taking Primperan® and use Grani-setron®/Ondansetron®.
- Anti-nausea drugs may cause a headache and/or constipation. You can take drugs, such as ParaTabs® or Bura-na® to alleviate the headache. Constipation should be treated with diet and medication. (See Treatment of constipation)
- If you are suffering from severe nausea, despite the use of anti-nausea medication, inform a doctor or a nurse.
- You must go to a doctor if there is severe vomiting, in spite of the anti-nausea medication, and if you are not able to eat and drink properly.

Nutrition

The treatments given may result in a loss of appetite. Even though you may at times feel it to be unpleasant, eating and drinking is important as it enables successful and uninterrupted treatment.

- As a rule, drinking a lot of fluids (1.5–2 litres a day) and eating easily digestible food after treatment alleviates

nausea and speeds up the recovery. You may drink what you prefer, such as water, juice or mineral water (beverages containing grapefruit are not recommended).

- You can prevent and reduce nausea by eating several small meals a day, eating slowly and chewing your food carefully. Eating a normal, varied and healthy diet is recommended during chemotherapy treatment. However, you may eat what you prefer, unless you have been told to avoid certain foods.
- Cultured dairy products, such as Asidofilus and Gefilus products, may be helpful.
- Acidic foods, such as pickles, lemons and soft drinks may help reduce nausea.
- Your sense of taste and smell may be temporarily altered
- Nutritional supplements available from pharmacies, such as FortiCare or Nutridrink, may be helpful. Ask the nurse for more information, if you like.
- The use of natural remedies is not recommended during chemotherapy treatment. You should discuss natural remedies with your doctor.
- Vitamin supplements that are allowed during chemotherapy treatment include Calcium D products and Multi-tabs multivitamin supplements.

Problems with skin and mucosa

Following your chemotherapy treatments, you may experience the following: dry skin, skin rash, sore and dry mouth, eye irritation and dry nasal mucosa. Mucosal side effects usually manifest themselves as pain, redness, and in some cases, sores. Fungal infections or the activation of the herpes virus may sometimes cause symptoms of infection, which should be treated with the appropriate medication.

Instructions for care of oral mucosa

- Dry mouth is a common side effect of chemotherapy. Drinking small amounts of fluids at regular intervals helps keep the mouth moist. If necessary, the production of saliva can be increased with products available from the pharmacy.
- Rinsing your mouth with saline solution between meals at least 4–5 times a day helps to retain good oral hygiene. How to prepare the saline solution: Dissolve 1 tablespoon of salt in 1 litre of water, **or** use 1/4 teaspoon of baking soda and 1/4 teaspoon of salt in 1 glass of water.
- Chamomile tea may help soothe the oral mucosa.
- If chewing is painful, use a blender to puree foods.
- Mild dishes, such as soup, egg dishes, porridge or gruel are recommended.
- Eating cold foods, such as ice cream, or sucking on ice cubes, soothes the mucosa.
- Avoid hot and spicy or acidic foods.
- Brush your teeth with a soft toothbrush and a mild toothpaste, e.g. OralBalance, available from the pharmacy.
- Dissolving tablets that help soothe oral mucosa, such as Bepanthen®, are also available from the pharmacy.
- The use of oral hygiene products that contain alcohol is not recommended.
- If you have severe problems with your oral mucosa, ask the nurse for some oral treatment gel prepared by the pharmacy at Satakunta Central Hospital.
- If there are white patches on your oral mucosa they should be treated with medication.

Dental care

You should have your teeth checked before the onset of chemotherapy treatments. If you have any problems with your teeth during your treatments, contact the Outpatient Clinic nurse before making a dental appointment. Dental treatment may result in changes in your scheduled chemotherapy treatments.

Dry eyes are the most common reason for **eye** irritation, causing itching, burning, a feeling of having something in your eye and/or eye watering. You can try moistening eye drops to alleviate the symptoms.

Dry **nasal** mucosa may cause symptoms, such as stuffiness, mild bleeding or pain in the nose. You can try using nasal drops containing Vitamin A or oil-based nasal sprays on your nasal mucosa.

You can apply Ceridal oil or hormone-free Repadina locally on dry **vaginal** mucosa.

Products for mucosal care are available from the pharmacy without prescription.

Diarrhoea

Damage to intestinal mucosal cells generally manifests itself as diarrhoea that may last for a few days. If the medication given to you is known to frequently cause diarrhoea, you will be informed at the onset of the treatment.

How to treat diarrhoea

- You should drink lots of fluids to prevent dehydration. Water, fruit juice, tea, beef broth or blueberry soup are good choices.
- Rice, mashed potatoes, mashed bananas or applesauce, toast or saltine crackers are usually soothing for the stomach.
- You should avoid foods that generate gas, such as coffee, peas, dark bread, cabbage, beans, sweets and very spicy food.
- Dairy products should also be avoided, if they cause stomach irritations
- Cultured milk products, such as Asidofilus and Gefilus products, may be helpful
- A grated apple that has been allowed to brown may help alleviate the diarrhoea. Peel an apple, grate it on a plate and allow it to turn brown before eating.
- If the diarrhoea does not settle within 24 hours, you should go to a pharmacy for an anti-diarrhoea drug (Imocur® or Imodium®) and take it according to the instructions on the package or separate instructions given by a nurse.
- If the diarrhoea does not stop within a couple of days, despite medication, you must see a doctor.

Constipation

Cytostatics, pain medication and anti-nausea drugs may slow down the bowel function and cause constipation. Constipation may also be caused by a lack of exercise or by eating foods that contain less fibre than normally.

Constipation means having problems passing stools, having bowel movements less than three times a week, and having hard stools. Constant bloating, stomach pains, wind, nausea or a feeling of weight in the abdomen may also be symptoms of constipation.

If your abdominal function slows down, you should immediately start treatment for constipation. You should have bowel movements at least every other day.

Treatment of constipation

- Drinking lots of fluids promotes bowel functions.
- Vegetables, fruit, whole-grain bread, wheat and oat bran, as well as flaxseed, are good sources of fibre.
- You can move about outdoors and engage in physical activity, according to how you are feeling.
- If your constipation has not alleviated in a couple of days with diet and exercise, you should start using stool softeners, such as Levolac®, Duphalac® or Laxoberon®, Pegorion® and Movicol®, available from the pharmacy without prescription. The dosage varies individually. Start with low doses, a few times a day.
- If constipation persists, despite medication, or if you experience sudden severe stomach pains, you must see a doctor.

Hair loss

Some cytostatics cause hair loss. Other body hair, such as eyelashes and eyebrows, may also become thinner. Hair will start to fall out about two weeks from the first round of treatment, but this varies between individuals. In some, hair falls out quickly in clumps, while in others this happens gradually. If your treatment causes hair loss, you will receive a voucher (€252,96) for a wig. The voucher will be sent to your home address by post. You should be fitted for and order a wig before your hair starts to fall out. Your hair will grow back once your chemotherapy treatment is completed.

Tiredness and fatigue

You may feel tired and fatigued during your chemotherapy treatment period. The cancer itself may be associated with tiredness, and the treatments put a strain on your body. Mood swings are common, and your sleep rhythm may be disturbed. The tiredness may also be caused by anaemia or a bacterial infection, both of which are treatable. In some cases, no obvious reason for the fatigue and tiredness can be found. Experiencing fatigue and tiredness is very individual, and they do not occur in all patients who receive chemotherapy.

Hormonal function

Your hormonal function may be disrupted. In women, the interval between menstrual periods may become longer, or menstruation may cease, either temporarily or permanently. Symptoms of menopause, such as sweating, sleeplessness and dry mucosa, may occur. You should tell the doctor or nurse about any symptoms that bother you.

Sexuality

Chemotherapy may cause changes that affect your sex life, such as a lack of sexual desire, mucosal irritation and erectile dysfunction. The use of a condom is recommended on the day you receive chemotherapy and for a week afterwards. If you wish, you can discuss any problems related to sexuality with the doctor or nurse.

Other side effects

Some cytostatics affect nail growth and cause nail brittleness and discolouration. Some cytostatic drugs may affect the function of sensory nerves in the arms and legs, causing prickling and numbness in the extremities. If the medication you receive is known to cause these or other side effects, you will be informed of them already at the start of the treatment.

Living with your illness

Mood swings and worrying about the future are natural reactions when you become ill and during treatment. At home, you should ask your family and friends for help if you are feeling fatigued. You can talk to the doctor or nurse if there is something worrying you. If necessary, an appointment with a rehabilitation counsellor, psychiatric nurse or similar can be reserved.

You can lead a normal life during your chemotherapy treatments. You can go out and engage in your hobbies, according to how you are feeling. Strenuous physical exertion is not recommended on the day you receive treatment and the next few days after it. A varied diet, a sufficient intake of fluids, and sufficient rest and sleep will help you to maintain your general health and enable you to recover from the treatment. You may drink small amounts of alcohol, such as a glass of wine or champagne at parties.

Going to the sauna and drinking alcohol is not recommended on the day of treatment or for a few days afterwards.

Handling secretions after chemotherapy

The cytostatic drugs are excreted in the urine, stool, sweat, saliva, vomit and semen **for about 7 days after chemotherapy treatment.**

Direct skin contact with secretions should be avoided. Wash your hands with soap and water after touching any secretions. After going to the toilet, close the lid and flush twice. Men should urinate while sitting down. Wash your hands after going to the toilet. Wash clothes soiled with secretions separately from your other laundry. Place protective pads (e.g. nappies) soiled with secretions in a plastic bag, tie it and discard with the trash.

When to contact the Oncology Outpatient Clinic or A&E?

If you have

- a fever above 38°C or if your temperature is slightly elevated for a few days
- symptoms of bleeding: extensive bruising, bleeding from the gums, prolonged nosebleeds, gynaecological bleeding, coughing up blood, vomiting blood, black stools or blood in the urine
- stomach pains, persistent constipation or diarrhoea
- nausea/severe vomiting, which persists for more than 2 days despite medication
- a rash
- chest pains
- symptoms, such as flu symptoms, fever, stomach pains etc. before the next chemotherapy treatment

**If you have any concerns, do not hesitate to contact the
Oncology Outpatient Clinic nurse.**


Contact information

Oncology Outpatient Clinic nurse  (02) 627 3732

- Monday–Friday 9 am–11 am and 1 pm–2.30 pm

Outside office hours

Satakunta Central Hospital  (02) 627 6868

Rauma Regional Hospital  (02) 835 2563

- after 4 pm and during weekends  (02) 835 2670



Images and layout: Taru Tolppo

Notes

Area with horizontal dotted lines for writing notes.



SATAKUNNAN SAIRAANHOITOPIIRI
-kumppanuudella terveyttä ja toimintakykyä-

Satakunta Central Hospital

Sairaalantie 3

28500 Pori

www.satshp.fi

Tel. exchange  0262771

Oncology Outpatient Clinic ...  02 627 3731

Location: Building O, ground floor (0)