



CHEMOTHERAPY FOR BREAST CANCER – HOW DO I DEAL WITH SIDE EFFECTS?



Englisch

INTRODUCTION

Chemotherapies have been used for over 60 years in the fight against cancer. A great deal has happened during this time: The substances used are **increasingly effective**, the combinations are **increasingly sophisticated**, and their use is **increasingly well tolerated**.

The days are long gone when chemotherapy was viewed as the last hope for cancer patients. Its range of application has now been extended to include the early stages of disease. As adjuvant therapy (see Glossary), it serves to ensure successful treatment, and as neoadjuvant therapy (see Glossary), it is even used before surgery.

New active substances and modes of action supplement the therapeutic arsenal, continuously making new therapy options against cancer possible. For those affected, this can mean a **considerable gain in survival time and often in quality of life as well**. After all, it shouldn't be forgotten that tumours and their metastases cause symptoms that can considerably impair quality of life.

Nevertheless, chemotherapy is always a stressful treatment. Doctors try to alleviate the **side effects** by means of concomitant therapies. In this brochure, we have compiled information about what you can do yourself in order to make the unpleasant effects of chemotherapy more tolerable.

We hope you will find the brochure informative and wish you all the best,

your Eisai GmbH

■ ■ WHAT IS CHEMOTHERAPY?

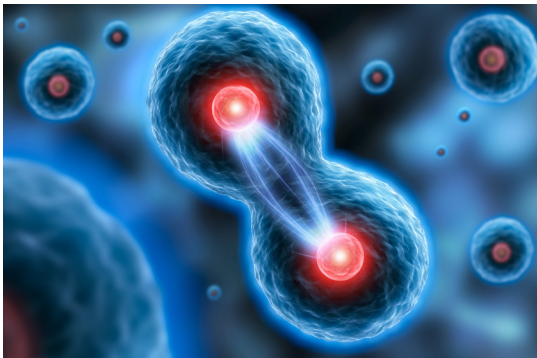
Colloquially, chemotherapy is a **medicinal treatment of cancer** with cytostatics, i.e. with natural or synthetic substances that inhibit cell growth. Occasionally, doctors also use the term chemotherapy for the medicinal treatment of infections. The topic of this brochure is chemotherapy in breast cancer.

■ ■ HOW DO CYTOSTATICS WORK?

The cytostatics used in chemotherapy inhibit cell growth by disrupting processes associated with cell division or cell growth.

As tumour cells divide very rapidly and in an uncontrolled manner, they are more susceptible to cytostatics than healthy cells. Furthermore, healthy cells possess repair mechanisms, which are absent in tumour cells.

Nevertheless, every chemotherapy **always impacts on healthy tissue as well**. Particularly affected are those tissues and organs that undergo rapid renewal and in which many cell divisions thus occur. These include the blood-forming cells and the mucous membranes. The effect and side effects of cytostatics are therefore closely associated with one another.



Cell division: Most cytostatics impair tumour growth by disrupting cell division.

■ ■ HOW ARE CYTOSTATICS USED?

Cytostatics vary in their origin and mode of action. Some cytostatics are chemically defined compounds, others have their origin in the plant or animal kingdom. For all cytostatics, it is the case that the dose makes the effect. If one administers too little, the cancer cells are not killed off in sufficient numbers; if one administers too much, the healthy body cells are damaged too severely.

Breaks, during which the normal body cells can recover, are also important for the tolerability of chemotherapy. At the same time, the cancer cells start to divide again during the breaks and are thus more susceptible to cytostatics again. Usually, therefore, several doses are given consecutively, followed by a break before the next administration. Doctors call the period from the first dose until the end of a treatment break a **cycle**.

However, it is not only the correct dose and the correct dosage cycle that are important. Many cytostatics are used in combination with adjuvant drugs, which are administered together with the actual active substances. Other cytostatics are more effective or better tolerated if they are administered at a low dose but in combination with another cytostatic.

Doctors call the combination, dose and cycle taken as a whole the **chemotherapy regimen**. It is not for nothing that the expression sounds a little dictatorial; with chemotherapies there is little scope for experimentation.

■ ■ WHAT IS THE AIM OF CHEMOTHERAPY?

The aim of chemotherapy depends on the stage of a disease and the treatment situation in each case. In some cases, it is advisable to begin chemotherapy even before the surgical removal of the tumour. This so-called **neoadjuvant chemotherapy** aims to reduce the **tumour** and thus make it **more easily operable**. In some cases, no operation is possible at all without the neoadjuvant therapy. In other cases, less extensive surgery can be performed after neoadjuvant chemotherapy and the breast more often preserved.

The so-called **adjuvant chemotherapy** is performed shortly after surgical removal of the tumour. It aims **to completely destroy the last remaining tumour cells** after the operation and thus to cure the cancer. The problem in cancer therapy is that even a single surviving cancer cell is sufficient to cause a relapse.

Even if the tumour was apparently completely removed, individual microscopically small offshoots can stay behind. The smallest metastases of cancer cells, known as micrometastases, can also hide anywhere in the body and cannot be detected by any medical imaging method. Adjuvant chemotherapy is performed as a precaution in order to destroy these cells as well.

In the later stages of breast cancer, chemotherapy is used to reduce the tumour and its metastases, thereby keeping the cancer in check. This usually goes well for quite a long period. If a cytostatic loses its efficacy, another active substance can be used in treatment. There are thus several therapeutic options available for treating the cancer. They are usually numbered consecutively and referred to as **first-line therapy**, **second-line therapy**, etc.

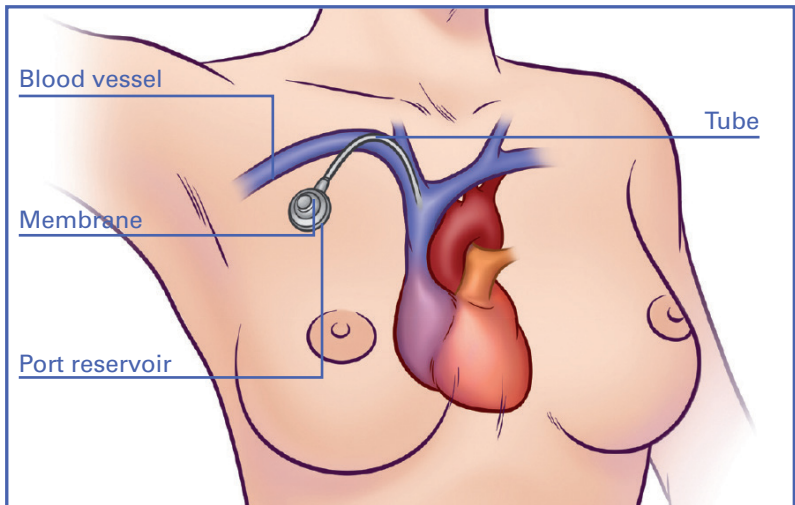
! Chemotherapies can be used at various stages of breast cancer.

■ TABLETS OR INFUSIONS?

Cytostatics are available as tablets, injections or infusions. The various **dosage forms have no effect at all on the efficacy or tolerability of a cytostatic.**

For patients who require intravenous cytostatics more frequently or over a long period, it can be advisable to implant a "port". A port is a small metal device (port chamber/port reservoir), which is usually inserted under the skin below the collar bone. From there, a thin tube leads to a large vein. The chamber can be easily felt through the skin and is sealed at the top by a silicone membrane. Punctures can thus be made through the skin into the port chamber to administer the drugs. The arm veins are thus spared, and the risk of an incorrectly placed needle is avoided

! Cytostatics can be administered in a variety of ways.
! This has no effect on their efficacy or tolerability.



■ *An implanted port system can simplify the administration of cytostatics.*

■ ■ WHAT DOES THE TERM “RESISTANCE” MEAN?

If cancer cells do **not or no longer react to cytostatics**, this is known as resistance. Usually, the tumour initially responds well to chemotherapy, but the efficacy then noticeably declines. The reason for this is that the tumour has adapted to the cytostatic.

During the many millions of cell divisions in the tumour, permanent **changes** also occur **in the genetic make-up** of a cell, known as **mutations**. Most of these mutations are not viable. However, some give the cells a survival advantage. If a mutation occurs that makes a tumour cell less susceptible to a cytostatic, the mutated cancer cell is more likely to survive than the others. It might even replicate itself, whereas the other cells die off.

At some point, all the remaining tumour cells contain the mutation, making them **non-susceptible to the chemotherapy**. By this stage, there is no longer any point in continuing with the previous chemotherapy. A change must be made to a different one. The new drug used should preferably have a **different mode of action** to the previous chemotherapy.

This reduces the likelihood of the cancer cells also being resistant to the new drug. No reliable test yet exists that can predict whether a tumour will respond to the active substance in question. The only option is thus to draw on the experience gained in studies and test the active substances in each individual case.

! Resistance causes a cytostatic to become ineffective. A change should then be made to a cytostatic with a different mode of action.

■ WHY DOES CHEMOTHERAPY HAVE SIDE EFFECTS?

As described above, the effect and side effects of cytostatics are closely associated. In exactly the same way as the main effect, side effects develop due to the inhibition of cell division. This inhibition affects all organs that rapidly renew themselves and whose cells thus divide rapidly. These include tumour cells as well as blood, bowel and hair root cells.

The severity of side effects and the organs affected depends on many factors. The type of medicine plays a role, as do personal and medical factors. Some side effects, such as hair loss, can hardly be influenced; other, such as nausea, can be relieved by additional medicines.

! Side effects are a direct result of the main effect and show that the drug can work.

■ WHAT IS A SUPPORTIVE THERAPY?

A supportive therapy as part of chemotherapy aims to make **side effects more tolerable or to prevent dangerous side effects**. One example of a supportive therapy is drugs given to combat nausea and retching.

If there is a risk of immunodeficiency, certain medicines can stimulate the formation of white blood cells. In the event of anaemia and the associated exhaustion (fatigue, see Glossary), iron preparations and erythropoietin (EPO) can be used to counteract these conditions.

If side effects occur during chemotherapy, you should always inform the doctor treating you and ask him/her about treatment options.

■ TIPS FOR REPEATED CHEMOTHERAPY

If chemotherapy once again becomes necessary, it may consist of the same regimen or a new therapy line. If it is the same regimen, you can assume that the same side effects will occur as last time. **If any side effect was particularly unpleasant for you, you should tell your doctor about it.** There may be a supportive therapy that was not used last time.

If new side effects, which were previously unknown to you, occur during the chemotherapy, you should inform your doctor immediately. It is possible that you no longer tolerate your therapy as well as the first time. In some cases, an allergy to a drug can also develop. These hypersensitivities to certain drugs usually become apparent during the infusion and take the form of breathlessness, skin symptoms or circulatory reactions (e.g. rapid heartbeat, pallor, cold sweat, severe dizziness).

In the event of a new treatment regimen, new side effects can occur. In addition to their inhibitory effect on cell division, most cytostatics have other side effects. **Ask your doctor, therefore, whether other side effects are to be expected with the new chemotherapy.**

When deciding whether to proceed with another chemotherapy, the benefit sometimes has to be weighed against any likely side effects. Quality of life plays an important role here. Side effects naturally reduce quality of life. It should be borne in mind, however, that successful chemotherapy can not only prolong life; it can also markedly increase quality of life by considerably improving the symptoms caused by the tumour and its metastases.

TIPS IF CHEMOTHERAPY SIDE EFFECTS OCCUR

Everybody knows it: The more attention one pays to something, the more important it becomes. The same is true for side effects. The more you can manage to distract yourself from them, the less you will suffer from them.

Positive thinking can often make side effects more tolerable. For example, it can help to think that the side effects are temporary and that they are a sign that the drug is effective against the tumour. Always discuss your side effects with the doctor treating you.

GENERAL TIPS FOR DEALING WITH SIDE EFFECTS

- Take your medicines for treating side effects regularly and don't wait until the side effects occur.
- Make sure that you divert yourself and think positively.
- Treat yourself to a regular reward.
- Get as much fresh air as possible and make sure to take regular physical exercise.
- Eat a healthy and tasty diet, with five small meals a day rather than three large ones.
- Get enough sleep.
- Avoid nicotine and alcohol or keep their consumption as low as possible.
- Avoid sunbathing and solariums.



Depending on your condition, continue doing sport. This can lessen side effects, improve your well-being and reduce the risk of relapse.

■ BLOOD COUNT CHANGES

Our blood has many tasks. These include defence against infection, blood clotting and supplying oxygen. The **white blood** cells are responsible for the **defence against infection**, the **blood platelets** are responsible for **blood clotting** and the red blood cells for oxygen transport.

Depending which blood components are reduced, an increased risk of infection, an increased tendency to bleeding, or exhaustion, also known as fatigue, can occur.

■ AVOIDING INFECTIONS

- Avoid crowds of people and contact with sick people and animals.
- Do not spend time in mould-infested rooms (e.g. damp cellars).
- Wash your hands regularly and thoroughly.
- If you still get an infection, do not hesitate to contact your doctor.

■ CONTACT A DOCTOR IF YOU EXPERIENCE ANY OF THE FOLLOWING SYMPTOMS

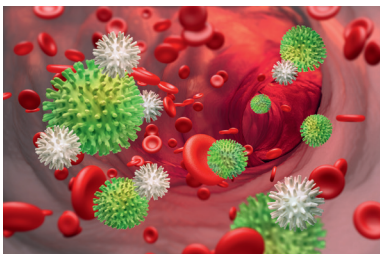
- Fever of 38 °C or above.
- Difficulty swallowing, sore throat, cough, breathlessness.
- Diarrhoea.
- Frequent or painful urination.

■ AVOIDING INJURIES AND BLEEDING

- When performing certain tasks, e.g. gardening, wear gloves in order to avoid injuries.
- Avoid alcohol because this impairs the reflexes and thus increases the risk of injury.
- Use soft toothbrushes and mild toothpaste. If necessary, avoid mouthwashes that sting.

■ DEALING WITH EXHAUSTION (FATIGUE)

- This can be caused by a (treatable) red blood cell deficiency. Therefore, discuss your fatigue with your doctor.
- Talk to your relatives and friends about your fatigue, so that they can make allowances for it.
- Pace yourself and allow yourself periods of rest. Be patient with yourself!
- Try to conserve your energy when performing activities (e.g. sit down while ironing).
- Stay as active as possible, because too much rest can make you even more fatigued.
- Gentle endurance sport counteracts the fatigue. But don't overexert yourself!



Blood cells provide the organs with oxygen and fend off infections. Many chemotherapies inhibit the formation of blood cells.

HAIR LOSS

Hair loss usually starts two to three weeks after the first treatment. It can either occur very suddenly and lead to rapid hair loss or arise gradually. Sometimes, not only scalp hair but also other body hair, such as eyebrows, eyelashes, underarm or pubic hair, falls out. **The hair almost always grows back again after completion of the chemotherapy.**

TIPS IF HAIR LOSS OCCURS

- Even before starting treatment, choose a wig that resembles your normal hair. The health insurance will partially pay for this. Your hairdresser can style the wig so that it closely resembles your original hairstyle.
- Do not wash your hair too often. Preferably use a mild shampoo (e.g. baby shampoo) and a soft hairbrush.
- Do not rub your hair dry; just pat it gently in the towel and preferably let it dry in the air, or you can use a hair-dryer that is not too hot.
- Do not use any heated hair rollers or curling tongs.
- Do not dye your hair or have a perm.
- If your hair is falling out rapidly, have it cut very short or even shave it off. A little tip: You can save some strands and then affix them to the edge of a headscarf. This will then look as though you have real hair underneath the head covering.
- If you have hardly any hair left, cover your head with a hat, headscarf or wig when you are outside to protect against sunburn, heat and cold.
- If your eyelashes and eyebrows also fall out, many breast centres offer special make-up courses for this period.

■ SKIN AND NAIL CHANGES

During chemotherapy, changes to the skin and nails can occur. The first signs are redness and skin rashes. Wounds and injuries heal less well overall. Blotchy discoloration can occur on the nails.

■ TIPS IF SKIN AND NAIL PROBLEMS OCCUR

- Only use lukewarm water and soap-free, mild wash lotions for cleaning your skin.
- Don't take excessively long baths or showers that are too hot. Avoid skincare products containing alcohol because they dry out the skin.
- Avoid heat, sweating and direct sunlight.
- Avoid direct skin contact with washing-up liquids and detergents.
- If possible, avoid shaving.
- Do not wear any tight, abrasive clothing.
- Cut your nails as short as possible so that they don't break easily.
- Cover any nail discoloration with opaque nail varnish.



■ *Direct contact with detergents or washing-up liquid can lead to skin problems.*

■ HAND-FOOT SYNDROME

Initially, this side effect takes the form of redness and sensory disturbances of the palms of the hands and soles of the feet. Subsequently, pain and swelling also occur. In severe cases, blisters form, and the skin begins to peel. This can cause severe pain.

■ TIPS IF HAND-FOOT SYNDROME OCCURS

- Avoid exposing the palms of your hands and soles of your feet to long periods of mechanical stress (e.g. using tools or hiking).
- Wear comfortable shoes, or leave your feet and hands completely uncovered as far as possible.
- Before treatment, have any excessively thick callouses on your feet and hands treated with a professional pedicure or manicure.
- Avoid heat and direct sunlight.
- Avoid excessively hot water when showering, bathing, washing up or cleaning.

■ NAUSEA AND VOMITING

Most cytostatics provoke nausea and vomiting. Effective drugs are available against this side effect. You should take these medicines preventively and not wait until after the nausea has developed. Preventive intake ensures that the chemotherapy is not subconsciously associated with nausea.

Preventive intake can be useful, for instance, if you had to deal with nausea during previous chemotherapy. It has also been reported that women who suffered increased nausea during pregnancy also tend to have a similar reaction to chemotherapy.

TIPS IF NAUSEA OCCURS

- You should preferably eat only a light diet on the day of infusion and for a few days afterwards.
- Eat several small meals throughout the day rather than the usual three large meals.
- Have a rest after meals.
- Suck sweets with a pleasant flavour.
- Drink water flavoured with ginger at regular intervals (pour boiling water over a piece of fresh ginger and let it infuse for five to ten minutes).
- Avoid unpleasant smells and air your living areas regularly.
- If possible, get lots of fresh air and try and get enough sleep.

TIPS IF VOMITING OCCURS

- Stomach acid can attack the teeth. After vomiting, therefore, rinse your mouth thoroughly with water.
- Severe vomiting can lead to considerable fluid loss. Balance this loss by drinking enough fluids.
- Sucking ice cubes or frozen pieces of fruit can lessen the nausea and replenish lost fluid.
- If you have to vomit frequently, wait four to eight hours before eating solid food.

■ ■ LOSS OF APPETITE

Cytostatic therapy can lead to a loss of appetite. This can be due to nausea, taste disturbances, disturbances in the sensation of fullness or psychological problems. Adequate nutrition is very important in cancer as it counteracts emaciation.

■ TIPS IF LOSS OF APPETITE OCCURS

- Eat whenever you want to.
- Listen to your body and eat whatever you are in the mood for.
- Season your food as you wish.
- Exercising in the fresh air before eating stimulates the appetite.
- Drink as little as possible while eating to avoid filling your stomach with liquid.

■ ■ TASTE DISTURBANCES

Chemotherapy can alter your taste sensation. This side effect usually disappears after treatment has finished.

■ TIPS IF TASTE DISTURBANCES OCCUR

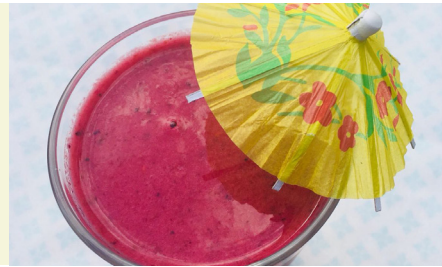
- Don't force yourself to eat foods that you don't like.
- Drink small quantities more often in order to flush away the bad taste.
- Rinse your mouth briefly before eating.
- Stimulate your salivary flow by drinking bitter drinks (tonic water, bitter lemon or black tea), lemon-flavoured drinks, sweets or chewing gum.

A RECIPE FOR YOU

BERRY BREAKFAST – SMOOTHIE

We would like to give you a recipe tip that gets your day off to a good start. The recipe provides two large 250 ml portions or four small 120 ml portions (very simple).

- 100 g yoghurt
- 225 g apple and cranberry juice, mixed
- 1 slice of pineapple
- 225 g mixed berries, frozen
- 100 g strawberries



Place everything in a mixer and mix until creamy.

If you prefer a creamier smoothie, you can add more yoghurt.
Adding ice cream makes the smoothie thicker.

Each portion contains lots of vitamins, 9 g protein and 320 kcal.

Enjoy!

NUTRITIONAL VALUES

Vitamin C	>👍👍👍👍	Potassium	👍👍	> 100%	>👍👍👍👍
Vitamin B6	>👍👍👍👍	Magnesium	👍	80-100%	👍👍👍👍
Calcium	👍👍	Iron	👍	60-79%	👍👍👍
Dietary fibre (non-starch poly- saccharides)	👍👍	Copper	👍	40-59%	👍👍
Iodine	👍👍	Vitamin B1	👍	20-39%	👍
Folate	👍👍	Vitamin B2	👍		
		Protein	👍		

■ INFLAMMATION OF THE MOUTH

During chemotherapy, painful redness and inflammation of the mouth can occur. This inflammation is irritating but usually not dangerous.

■ TIPS IF INFLAMMATION OF THE MOUTH OCCURS

- Do not use any mouthwash that stings or contains alcohol. Use camomile or sage tea instead.
- Eat lots of dairy products.
- Moisturise your lips regularly with lip balsam.
- Stimulate your salivary flow with sugar-free sweets or chewing gum.
- Avoid very acidic foods and drinks.
- Don't eat any foods that are too spicy.
- Avoid foods that are rough or have sharp edges, such as fresh bread crusts, crisps or rusks.
- Avoid scalding your mouth. Let your food and hot drinks cool down sufficiently before consuming them.
- Avoid alcohol and cigarettes if possible.
- In the event of fungal infection, you should apply the prescribed medicines regularly.

■ DIARRHOEA

Diarrhoea can be triggered by the chemotherapy itself, but it can also be a sign of infection. Severe and prolonged diarrhoea leads to dehydration and electrolyte imbalances, which require medical intervention.

If you pass more than three watery stools daily or have diarrhoea accompanied by fever, you should consult a doctor immediately. Milder diarrhoea can be treated medicinally.

■ TIPS AGAINST DIARRHOEA

- Use of so-called probiotics before and during chemotherapy can lessen diarrhoea.
- Restrict yourself to a light, low-fat and low-fibre diet.
- Eat daily four to five very finely grated, unpeeled apples (leave the apple pulp to stand until brown after grating). The pectins it contains swell up in the intestine thereby reducing the diarrhoea.
- Avoid foods that overstimulate the digestion (e.g. cabbage, hot spices).
- Avoid foods that make you feel bloated.
- Drink two to three litres a day in order to balance out fluid loss. Still mineral water or herbal teas are best. Special electrolyte solutions from the pharmacy are advisable if you experience severe diarrhoea.
- Avoid caffeinated drinks, alcohol and cigarettes.



■ *Diarrhoea leads to severe fluid loss. This has to be replaced by drinking sufficient amounts.*

■ ■ CONSTIPATION

Constipation is a possible side effect of cytostatics, but can also be triggered by strong painkillers. Constipation can contribute to loss of appetite and intensify nausea.

■ TIPS IF CONSTIPATION OCCURS

- Eat a high-fibre diet and drink plenty of fluids.
- Eat dried fruits.
- Get sufficient physical exercise.
- After consulting your doctor, take laxatives or use enemas.

■ ■ SENSORY DISTURBANCES

Cytostatics can lead to numbness or sensory disturbances in the hands and feet. In addition, tingling or a burning sensation can occur. In some cases, the affected areas are also painful. In contrast to hand-foot syndrome, however, no skin changes occur.

Sensory disturbances usually subside again but can persist for some time after the last infusion.

TIPS IF SENSORY DISTURBANCES OCCUR

- Sensory disturbances in the limbs lead to an increased risk of injury.
- Be careful with pointed and sharp objects.
- Exercise caution with hot water and hot objects, e.g. radiators.
- Sensory disturbances in the feet can cause you to walk unsteadily. Be especially careful on slippery or uneven surfaces.
- Wear comfortable, secure footwear.
- Arrange for relatives or professionals to give you manicures and pedicures.
- Pay attention to your footwear. Sometimes, tight shoes or ill-fitting socks are not noticed in time and can lead to severe blister formation.
- Perform cautious mobility exercises with the affected limbs in order to keep them supple.

FLUID RETENTION

Some cytostatics can lead to temporary water retention in the tissues. This can, for example, result in swollen legs. In addition, water retention leads to sudden weight gain.

TIPS IF WATER RETENTION OCCURS

- After consulting your doctor, you can drink diuretic teas.
- Support stockings can help if you experience water retention in your legs.

■ ■ DISTURBANCES OF THE MENSTRUAL CYCLE

Most patients in whom breast cancer occurs before the menopause experience disturbances in their menstrual cycle due to the chemotherapy. As the treatment impairs the function of the ovaries, menopausal symptoms can occur.

Various factors determine whether ovarian function recovers after the end of treatment. The type of chemotherapy and the patient's age play a particular role here. In some cases, women over 40, in particular, remain permanently in the menopause after chemotherapy.

■ TIPS IF MENOPAUSAL SYMPTOMS OCCUR

- Dress in a way that allows you to remove items of clothing if you experience hot flashes.
- Choose clothes made of cotton or linen, in which you won't sweat so much.
- After consulting your doctor, use herbal products to combat menopausal symptoms. Women with a hormone-dependent tumour should take specific advice, as not all herbal products are suitable.
- If you suffer from vaginal dryness, use a lubricant obtainable from the pharmacy. Normal olive oil can also help. Your doctor or pharmacist can advise you.

■ ■ DESIRE TO HAVE CHILDREN AND CONTRACEPTION

After chemotherapy or radiotherapy, there are usually no medical objections to pregnancy or procreation. In some circumstances, however, chemotherapy can damage the ovaries or testicles to such an extent that this leads to infertility in those affected. New medical therapies and techniques of reproductive medicine have been developed in recent years to reduce damage to the ovaries during chemotherapy or to allow harvesting and permanent preservation of egg cells or ovarian tissue in the event of a subsequent desire to have children. You should therefore not hesitate to consult your treating doctor if you want to have children, ideally before starting treatment. You can also find information at www.fertiprotekt.com or www.krebsgesellschaft.de.

Pregnancy during chemotherapy and hormone therapy should be avoided due to the increased risk of malformation or possible damage to the newborn. Condoms and or the coil are safe and appropriate contraceptive methods – please consult your doctor. Your menstrual cycle will usually stop during chemotherapy; it is therefore rare, but not completely impossible, to become pregnant. You must therefore always use a suitable form of contraception.

■ ■ A BREAST CANCER DIAGNOSIS – PSYCHO-ONCOLOGICAL ASPECTS

Anyone receiving the diagnosis of breast cancer usually experiences an extreme life crisis. Life changes completely from one day to the next. The treatment of breast cancer with chemotherapy severely impairs the whole body and thus also one's psychological well-being.

Concomitant psycho-oncological therapy makes it easier to process the experience of disease and is thus strongly recommended. Nowadays, nearly all hospitals provide it. Various studies have shown that psychosocial support can improve the quality of life of those affected. Today, professionals agree: Proficient care of cancer patients includes not only an effective medical therapy but also concomitant psychosocial support.

TIPS FOR YOUR PSYCHOLOGICAL WELL-BEING

- Treat yourself to things that make you feel well: A soothing massage, a pleasant walk in the park, an afternoon in the café with a friend – try to derive pleasure from activities and divert yourself.
- Don't feel guilty – you are not to blame for your illness. Agree that you need help and also accept such help.
- Talk, talk, talk: Talk about your fears, worries and problems with your doctor, other patients and your relatives. It can also be helpful to attend a self-help group for women with breast cancer; you can find information on self-help groups, for example, at www.krebsinformations-dienst.de/wegweiser or www.frauenselbsthilfe.de.
- Don't be afraid to seek psychological help; specialist psycho-oncologists know exactly the problems and questions raised by cancer patients and can help you to better manage your disease and the associated side effects. Psycho-oncological advice can also provide valuable support for your relatives. You can also find useful tips at www.ratgeber-krebs.com.
- Try to accept that you are facing a difficult situation in life. The chemotherapy will treat your cancer, and the treatment is finite – afterwards you will most likely be better again.
- Relaxation techniques: Cancer treatment is a physically and emotionally stressful time; various relaxation techniques, such as yoga, Qi Gong or Tai Chi, can help to subdue inner agitation and restore your emotional equilibrium. Many courses are also reimbursed by the health insurance schemes.
- Creative therapies: Express your feelings! Dealing creatively with your thoughts and feelings can support you in processing your disease. Many cancer advice centres and self-help organisations offer music, dance, writing or art therapies, which can help you to deal with stressful feelings.



■ A BREAST CANCER DIAGNOSIS – WHAT CAN I DO FOR MYSELF?

■ INTERVIEW WITH DR JUTTA HÜBNER ON THE TOPIC OF COMPLEMENTARY ONCOLOGY

Dr Jutta Hübner, MD is Head of the Department of Palliative Medicine, Supportive and Complementary Oncology at the University Centre for Tumour Diseases (UCT) of the J. W. Goethe University Hospital, Frankfurt.

Whenever possible, women suffering from breast cancer want to contribute something to the healing process themselves and look for supplementary methods in addition to conventional medical therapy. The range is wide, and professional advice must be sought when choosing appropriate methods.

■ *Dr Hübner, where can interested women find competent information on complementary methods?*

First of all, the patients should enquire directly at the breast cancer centre treating them. As it is still very rare to find competent advice centres for complementary oncology, the Cancer Information Service in Heidelberg can provide further help over the phone. Caution is urged with other sources/providers, e.g. on the internet. Esoteric approaches do not form part of complementary oncology.

■ *What exactly does complementary oncology mean?*

Complementary oncology is a concomitant therapy that often originates from naturopathy or experience-based medicine. It differs from conventional medicine in that it is far less evidence based. This means that its materials and procedures do not yet have the study-based scientific quality of conventional therapies. Accordingly, they should only be used as therapy that is supplementary to conventional medicine.

■ *Which active substances and methods are associated with complementary oncology?*

In Germany and German-speaking countries, the supplementary therapy is mainly substance-based. This means that substances such as dietary supplements are used to mobilise the body's own strengths. In addition to vitamins and trace elements, secondary plant substances, such as immunostimulants and mistletoe therapy, are being

increasingly used in this country. As research into these substances is sometimes still at the initial stage, as is the case with mistletoe, interested patients should only start a substance-based therapy in consultation with the doctor treating them. In other countries, complementary oncology focuses more on the psychological/spiritual area.

■ *Which concomitant therapeutic options are advisable for patients with metastatic breast cancer?*

The tumour and the chemotherapy demand a lot of strength or sap a great deal of energy, as some patients also say. Patients should therefore first and foremost ensure a healthy lifestyle. This includes a balanced diet, although it is not necessary to follow a special anti-cancer diet. In addition, patients should remain physically active, as far as possible. Rehabilitation clinics and increasingly also local communities offer special sports activities for cancer patients. Information on this can be obtained at the breast cancer centres. Strolls and Nordic walking can also be undertaken independently after consulting the treating physician. With regard to non-substance based complementary measures, it is generally up to the patients themselves to decide which therapy is appropriate and provides them with wellbeing. When considering relaxation exercises, such as Tai Chi, Qi Gong and yoga, patients should simply ensure to start with a good trainer at their side. Unfortunately, I cannot give any general answer on the options for substance-based therapy. The concomitant therapy should always be agreed with the treating oncologist on an individual basis.

■ *Are there substances that are completely unsuitable for breast cancer patients? What should women consider?*

In principle, no supplementary substances should be taken without a clear indication as too many vitamins and trace elements can also be harmful. If a deficiency is suspected, it should be diagnosed by means of a medical blood test. Antioxidants must not be taken in combination with chemotherapy as they can influence the effect of the chemotherapy. In addition, patients should be cautious when using herbal medicines. These can contain herbal hormones (phyto-oestrogens), which could have a negative effect. These mainly include extracts from soya, red clover, Chinese angelica (*Angelica sinensis*) and ginseng. Phyto-oestrogens can also be contained in herbal mixtures, such as are used in traditional Chinese medicine. Accordingly, the advice on appropriate complementary therapies must be very well geared to the actual therapy in order to avoid the occurrence of interactions.



A good trainer can help you in learning a relaxation exercise.

■ *Which complementary substances can be used to treat the side effects of breast cancer therapy?*

During the chemotherapy, patients often suffer from nausea and vomiting. In this case, ginger can be a great help and so too can acupuncture. Licorice and eating porridge in the morning can relieve gastric symptoms, while eating a grated apple can counteract diarrhoea. Study data have shown that osteoporosis, which often occurs during breast cancer therapy, can be prevented by vitamin D administration. Black cohosh can be given to treat hot flushes. Although it is officially considered a phyto-oestrogen, scientific studies have shown that, similar to tamoxifen, it does not promote the growth of breast cancer cells. Initial research results give us grounds for hope that black cohosh has even an additional inhibitory effect on tumour growth and can therefore be recommended. Valerian and evening lavender foot baths are very effective if sleep disturbances occur. Other aromatics, such as lime and orange, can also have an activating effect, depending on what the patient wants.



An infusion of fresh ginger roots can help against nausea.

■ CHECK LIST FOR COMPLEMENTARY ONCOLOGY

- Enquire at the breast cancer centre treating you about a competent person to advise you on the topic of complementary oncology. If you are not given adequate information, the Cancer Information Centre in Heidelberg (Tel.: 0800 /420 30 40 every day from 8.00–20.00, calls are free of charge) can provide further help.
- You can find further literature in bookshops, see book tips.
- Make sure to eat a balanced diet.
- Stay physically active to the degree possible.
- You decide whether and which non-substance-based complementary therapy does you good.
- Whether and which substance-based complementary therapy is appropriate for you should be decided only in consultation with your treating physician.
- Supplementary active substances can harm the body if used incorrectly.
- Be cautious with the use of antioxidants and herbal products.

■ *Do the health insurance schemes cover the costs of complementary treatment?*

In principle, statutory health insurance patients and private patients have to pay for the treatment themselves. But, as always, the exception proves the rule. Usually, however, the treatment costs only amount to a few cents per day. With regard to dubious providers, the motto “the more expensive something is, the more suspect” applies.

■ *Is there any advice you would like to give the patients?*

Complementary oncology offers patients a good chance to do something for themselves. They can use it to act autonomously and regain trust in their own body.

■ *Many thanks for this discussion, Dr Hübner.*

Interview conducted: November 2016

BOOK TIPS

Hübner, Jutta

Diagnose KREBS ... was mir jetzt hilft

Komplementäre Therapien sinnvoll nutzen

Schattauer publishers · Stuttgart 2011 · ISBN 978-3-7945-2830-1

What can I do now? ... The initial shock after a cancer diagnosis is deep-seated. As well as support from your partner, relatives and friends, one thing is now of primary importance: well-founded, "customised" knowledge, so that you can combat the disease in an active and informed way.

Otto, Sandra

Brustkrebs – Hilfe im Bürokratie-Dschungel

Springer · Berlin - Heidelberg 2015 · ISBN 978-3-662-47072-5

This non-medical guide provides a detailed summary of all information and steps regarding financial protection and clarification of social-legal questions during and after breast cancer and therapy.

Beuth, Josef

Gut durch die Krebstherapie – Von Abwehrschwäche bis Zahnfleischbluten: wie Sie Nebenwirkungen und Beschwerden lindern

Trias · Stuttgart 2009 · ISBN 978-3-8304-3480-1

The fight against cancer with radiotherapy and chemotherapy is stressful and associated with many, often serious, side effects. This book provides support, precisely adapted to your situation.

Baumann, Freerk

Sport und körperliche Aktivität in der Onkologie

Springer · Berlin - Heidelberg 2012 · ISBN 978-3-642-25066-8

The positive effect of sport in cancer prevention is well known. But studies have confirmed that, in tumour patients too, physical exercise reduces the symptoms of fatigue syndrome, improves psychological well-being and increases quality of life.

GLOSSARY

Adjuvant chemotherapy: Chemotherapy performed after an operation

Alopecia: Hair loss. Frequent concomitant symptom of chemotherapy

Antiemetics: Medicines to treat nausea and retching

Chemotherapy: Treatment with substances that impair cell growth (e.g. cytostatics, but also antibiotics)

Curative chemotherapy: Chemotherapy aimed at a complete cure (e.g. adjuvant chemotherapy)

Cytostatics: Active substances, e.g. used in cancer treatment, that inhibit the growth and proliferation of cells that divide rapidly and frequently

Degree of malignancy: Indicates how aggressive a tumour is

Fatigue: Particular form of exhaustion that frequently occurs with chemotherapy

Local recurrence: New growth of tumours at the original site

Malignant: Cancerous

Mamma: Female breast

Mammary carcinoma: Breast cancer

Mastectomy: Amputation of the breast

Metastasis: Secondary tumour, spread of tumour cells to other body areas, e.g. via the blood and the lymph

Micrometastases: Metastases that are (still) so small that they cannot be detected by any medical imaging method

Neoadjuvant (= pre-operative) chemotherapy: Chemotherapy to shrink a tumour with the aim of making it more easily operable

Oncology: Medical speciality concerned with the development, diagnosis, treatment and prevention of cancerous diseases

Oral cytostatics: Chemotherapy medicines that are available, for example, in tablet form and are swallowed

Palliative chemotherapy: Therapy with cytostatics aimed at prolonging survival time and improving quality of life. Palliative chemotherapy is used when a cancer is too far advanced to be curable

Progression: Advance of a disease

Recurrence: Reappearance of a disease, relapse

Regimen: Doctors use the term chemotherapy regimen to describe the combination, dose and cycle taken as a whole

Remission: Partial or complete regression of a disease

Senology: The branch of medicine dealing with the female breast

Supportive therapy: Measures aimed at supporting and/or making a treatment (e.g. chemotherapy) more tolerable

Systemic therapy: Therapy in which an active substance is distributed via the blood throughout the entire body. In cancer, e.g. chemotherapy or antihormone therapy

Tumour: Tissue swelling, e.g. due to proliferation of cells. A distinction is made between benign and malignant tumours

INFORMATION AND ADVICE

Brustkrebs Deutschland e. V. **[Breast Cancer Germany, registered association]**

Lise-Meitner-Str. 7
85662 Hohenbrunn (district of Munich)
Tel.: +49 (0) 89 / 41 61 98 00
Fax: +49 (0) 89 / 41 61 98 01
Free hotline: 0800 0 117 112
E-Mail: info@brustkrebsdeutschland.de
www.brustkrebsdeutschland.de

Deutsche Krebsgesellschaft e. V. **[German Cancer Association, registered association]**

Kuno-Fischer-Str. 8
14057 Berlin
Tel: + 49 (0) 30 322932-90
Fax: + 49 (0) 30 3229329-66
www.krebsgesellschaft.de

Krebsinformationsdienst **Deutsches Krebsforschungszentrum** **[Cancer Information Service** **German Cancer Research Centre]**

Im Neuenheimer Feld 280
69120 Heidelberg
Free hotline: +49 (0) 800 / 420 30 40
www.krebsinformationsdienst.de

Stiftung Deutsche Krebshilfe-Infonetz Krebs **[German Cancer Aid Foundation-Cancer Information Network]**

Buschstr. 32
53113 Bonn
Tel.: +49 (0) 800 / 80 70 88 77 (free of charge)
Mon. to Fri. 8.00 – 17.00
www.infonetz-krebs.de

HELP WITH SELF-HELP

Often, the doctor's advice just isn't sufficient. **Many problems associated with breast cancer can be better discussed with other people who are affected.**

It can be a great help to exchange views and to know that others share the same fate. Particularly in the case of breast cancer, there is now a great deal of self-help available in Germany. Below, we have compiled important addresses and links for you.

Frauenselbsthilfe nach Krebs e. V. „Haus der Krebselbsthilfe“ [Self-help for women after cancer, registered association, “House of cancer self-help”]

Thomas-Mann-Straße 40
53111 Bonn
Tel.: +49 (0) 228 / 33 889 – 402
Fax: +49 (0) 228 / 33 889 – 401
www.frauenselbsthilfe.de

mamazone – Frauen und Forschung gegen Brustkrebs e. V. [mamazone – Women and research against breast cancer, registered association]

PO box 31 02 20
86063 Augsburg
Tel.: +49 (0) 821 / 5213 - 144
Fax: +49 (0) 821 / 5213 – 143
www.mamazone.de

Über den Berg e. V. Gemeinnütziger Verein zur Verbesserung der Lebensqualität von Krebspatienten durch Bewegung und Sport [Turning the corner, registered association Friendly society for improving the quality of life of cancer patients through exercise and sport]

Kaiser-Otto-Straße 48
50259 Pulheim
Tel.: +49 (0) 2234 981 72 66
www.überdenberg.de

Austria

Österreichische Krebshilfe-Gesellschaft [Austrian Cancer Aid Association]

Tuchlauben 19
AT-1010 Vienna
Tel.: +43 (0) 1 / 796 64 50
Fax: +43 (0) 1 / 796 64 50-9
www.krebshilfe.net

Switzerland

Krebsliga Schweiz [Cancer League Switzerland]

Effingerstrasse 40
CH-3001 Bern
Tel.: +41 (0) 31 389 91 00
Fax: +41 (0) 31 389 91 60
info@krebsliga.ch

Cancer telephone and helpline

Free hotline: +41 (0) 800 11 88 11
E-mail: helpline@krebsliga.ch
Forum: www.krebsforum.ch

DE-HAL-20-00029; 12/2020; HAL0129B



Distribution in Germany:
Eisai GmbH
Edmund-Rumpler-Straße 3
60549 Frankfurt am Main
kontakt@eisai.net

Distribution in Austria:
Eisai GesmbH, Saturn Tower
Leonard-Bernstein-Straße 10
A-1220 Vienna
kontakt_wien@eisai.net

Distribution in Switzerland:
Eisai Pharma AG
Leutschenbachstrasse 95
CH-8050 Zurich
Tel.: +41 (0) 44 / 306 12 12

hke
human health care