



Breast Cancer Survivorship

Health and Fertility After Treatment

Breast cancer is most often diagnosed in middle-aged women, but the disease also can affect younger women. About 1 in 10 new cases of breast cancer are found in women younger than age 45 years. Younger women can face several health challenges after treatment, including the possibility of early **menopause**, sexual problems, and fertility problems. Talking about these concerns before treatment can help you be prepared for a healthier life after recovery.

This pamphlet explains

- *how cancer treatments can affect your body*
- *how to safely manage the side effects of cancer treatment*
- *how to improve your bone, heart, and brain health*
- *how to talk about self-image and sex after cancer treatment*

How Cancer Treatments Affect Your Body

Treatment options for breast cancer can include surgery, **chemotherapy**, **radiation therapy**, and **estrogen** blocking medication. Some types of treatment can trigger early menopause symptoms in premenopausal women (those who have not yet reached natural menopause). Some of these treatments also can increase the risk of certain long-term health problems.

Why does cancer treatment cause symptoms of menopause?

Natural menopause occurs when the **ovaries** stop making estrogen. Normally, this happens over a period

of several years. But certain forms of breast cancer therapy, like chemotherapy, can affect the function of the ovaries. This can trigger symptoms of early menopause in premenopausal women.

Why does chemotherapy cause symptoms of menopause?

Chemotherapy can damage the ovaries. This can cause your **menstrual periods** to become irregular or even stop. The older you are, the more likely your periods will not return. After chemotherapy you also may experience hot flashes, vaginal dryness, urinary problems, and sleep problems. If your periods are irregular and you do not want to get pregnant, you should talk with your

obstetrician–gynecologist (ob-gyn) or other health care professional about birth control that will be safe for you.

Why does estrogen-blocking therapy cause symptoms of menopause?

Two thirds of all cases of breast cancer are estrogen-receptor positive. This means the cancer cells grow in response to estrogen. Women with estrogen-receptor positive breast cancer may take **tamoxifen** to stop cancer from coming back. This medication blocks the action of estrogen in the body and sometimes causes menopause symptoms. Another type of medication, **aromatase inhibitors**, lowers levels of estrogen in the body. This lowering of estrogen also can cause menopause symptoms. Aromatase inhibitors are not given to premenopausal women unless they also take a medication to stop the ovaries from making estrogen. This is called ovarian suppression.

What future health problems may be associated with breast cancer treatment?

Heart health. Some types of chemotherapy can damage the heart and blood vessels. This can increase the risk of heart disease. Estrogen-blocking medications also may increase the risk of heart disease in some women.

Bone health. The natural estrogen made in the body protects against bone loss. Cancer treatments that reduce estrogen levels can increase the risk of **osteoporosis**.

Brain health. Cancer treatment can cause problems with memory, focus, and concentration. Some people have problems with memory for many years after chemotherapy.

Safely Managing Menopause Side Effects

Talk with your oncologist (cancer doctor), ob-gyn, or other health care professional about your cancer treatment and whether menopause symptoms are a possible side effect. Together, you can plan for safely managing side effects before they occur.

Can I take estrogen therapy for menopause symptoms?

Estrogen therapy that is given as a pill, patch, gel, or spray is called systemic therapy. With systemic therapy, estrogen is released into the bloodstream and travels to the organs and tissues where it can have a positive effect. Systemic estrogen therapy often is not recommended for breast cancer survivors. There are concerns that systemic estrogen may trigger breast cancer cells to grow and cause the cancer to come back.

Can I use vaginal estrogen for vaginal dryness?

Based on your type of cancer, you may be able to use vaginal estrogen. Vaginal estrogen comes in a cream, tablet, or ring. This therapy releases small doses of estrogen into the vagina. Unlike systemic estrogen,

vaginal estrogen is absorbed by the body in very small amounts. This small, temporary increase in estrogen levels does not appear to increase the risk of breast cancer coming back. Talk with your ob-gyn to weigh the risks and benefits.

What are some nonhormonal treatments for vaginal dryness?

- Vaginal moisturizers replace moisture of the vagina. These moisturizers do not contain **hormones**. There are several brands that you can buy online or at your local pharmacy.
- Lubricants can be used when you have **sexual intercourse**.

What are some nonhormonal treatments for hot flashes?

- Some lifestyle changes may help with hot flashes. These changes include avoiding spicy foods, alcohol, caffeine, and hot drinks; dressing in loose layers; doing breathing exercises and meditation; and getting regular exercise.
- **Cognitive behavioral therapy (CBT)** has shown promise in treating hot flashes, sleep problems, and mood disturbances in women being treated for cancer. In CBT, you learn to spot possible triggers for your hot flashes and practical skills to cope with them.
- Some **antidepressants**, antiseizure medications, and blood pressure medications may help relieve hot flashes. The type of medication that is right for you depends on other medications you may be taking.

Staying Healthy After Cancer

After breast cancer treatment, there are many things you can do to stay healthy. Your oncologist, ob-gyn, and other health care professionals can help you make healthy decisions. They can provide useful resources and make sure you get the right follow-up and preventive care.

What happens during follow-up visits with my oncologist?

Your oncologist will check your overall health and ask you about any new signs and symptoms. You may have blood tests or scans to check for cancer. Follow-up visits may become less frequent the longer you stay healthy and cancer-free.

Should I still see my ob-gyn after my breast cancer treatment?

Yes. Your ob-gyn will perform well-woman exams and screenings. You also can discuss the following with your ob-gyn:

- Birth control methods that are safe for breast cancer survivors

- Your sexual health and sexual satisfaction
- Your future plans to have children
- Possible treatment if you have difficulty getting pregnant

Should I keep seeing my primary doctor?

Yes. Your primary doctor can help you stay healthy over time. Your primary doctor can order screening tests to check other areas of your health not related to your cancer. This can include screenings for **diabetes mellitus**, arthritis, and other conditions that often come with aging.

What can I do to lower my risk of osteoporosis?

Increasing your intake of calcium and vitamin D, doing regular weight-bearing exercise, and limiting alcohol can help lower your risk of fractures. A test to check bone mineral density may be recommended by your ob-gyn or other health care professional. If results show that you are at increased risk of osteoporosis, medications can prevent bone loss and protect against fractures.

What can I do to decrease my risk of heart disease?

Living a heart-healthy lifestyle means eating a healthy diet, limiting alcohol, staying at a healthy weight, not smoking, and getting daily exercise. A heart-healthy

diet includes fruit, vegetables, whole grains, dairy products, and lean protein. Also, your ob-gyn or other health care professional should routinely check your blood pressure. He or she also may recommend testing for diabetes and checking your **cholesterol** levels.

What can I do for my brain health?

Some people have cognitive problems after chemotherapy for breast cancer. Researchers are looking at whether certain lifestyle changes, such as dietary changes (more fruits and vegetables, limiting fat intake), getting more exercise, increasing social interactions, and “brain exercises” (games and puzzles) help with this common side effect. Even though more research is needed, it makes sense to make these changes. They may have other benefits for your health.

Self-Image and Sex After Cancer

Many people with breast cancer feel self-conscious after their treatment. Feeling sexual after breast cancer treatment also can be a challenge. If you have sexual concerns, the following suggestions may be helpful:

- If you have a partner, talk with him or her about how you are feeling. An open, honest talk can lead to greater understanding about your feelings related to your cancer treatments.
- Consider talking about your concerns with your ob-gyn or other health care professional. If you are not sure what to say, you can begin with a statement like the following:
 - “I am having some concerns about my sex life.”
 - “I am worried about how having cancer is affecting my sex life with my partner.”
 - “I am feeling sad because I do not feel the same way about sex.”
 - “How do I tell my partner that I feel unattractive since my cancer treatment?”
 - “Sex is painful for me. What can I do?”
- Give yourself time to adjust. Cancer treatment is a life-changing experience and may affect your self-image. If you have a partner, you may want to focus on other ways of being close rather than sexual activity.

Preserving Fertility

Young women with breast cancer may wonder if they can have children after treatment. Chemotherapy and radiation therapy can damage the **eggs** inside the **ovaries**, resulting in **infertility**. For some women, this infertility is permanent. For others, pregnancy may be possible after treatment, but it may be harder to get pregnant.

If you want to have children after your breast cancer treatment, your oncologist may recommend that you take steps to preserve your fertility. One option may be to see a fertility specialist before your treatment. He or she can explain possible options, including **in vitro fertilization (IVF)** and **oocyte cryopreservation**.

With IVF, a man’s sperm is combined with a woman’s egg in a laboratory. The resulting **embryo** is then transferred to the **uterus**. Embryos can be frozen and transferred many years later. With oocyte cryopreservation—“freezing your eggs”—several eggs are removed from the ovaries. The unfertilized eggs are then frozen for later use in IVF.

Embryo freezing and egg freezing have benefits and drawbacks. A fertility expert can explain your options, help you make decisions, and plan your fertility treatment before you start cancer treatment.

Finally ...

When you are a breast cancer survivor, your health after treatment is important. If you have not yet started treatment, talk with your ob-gyn, oncologist, or other health care professional about side effects that may occur during or after your treatment. Discuss how you might treat these side effects if they occur. If you have finished your treatment, talk with your health care professionals about side effects that bother you. Talking openly may lead to solutions that improve your quality of life and protect your long-term health.

Glossary

Antidepressants: Drugs that are used to treat depression.

Aromatase Inhibitors: Drugs that lower the level of estrogen in the body to treat breast cancer.

Chemotherapy: Treatment of cancer with drugs.

Cholesterol: A natural substance that is a building block for cells and hormones. This substance helps carry fat through the blood vessels for use or storage in other parts of the body.

Cognitive Behavioral Therapy (CBT): A type of psychotherapy. During CBT, you learn specific skills that help you change the way you think about and cope with problems.

Diabetes Mellitus: A condition in which the levels of sugar in the blood are too high.

Eggs: The female reproductive cells made in and released from the ovaries. Also called the ova.

Embryo: The stage of development that starts at fertilization (joining of an egg and sperm) and lasts up to 8 weeks.

Estrogen: A female hormone produced in the ovaries.

Hormones: Substances made in the body that control the function of cells or organs.

Infertility: The inability to get pregnant after 1 year of having regular sexual intercourse without the use of birth control.

In Vitro Fertilization (IVF): A procedure in which an egg is removed from a woman's ovary, fertilized in a laboratory with the man's sperm, and then transferred to the woman's uterus to achieve a pregnancy.

Menopause: The time when a woman's menstrual periods stop permanently. Menopause is confirmed after 1 year of no periods.

Menstrual Periods: The monthly shedding of blood and tissue from the uterus.

Obstetrician–Gynecologist (Ob-Gyn): A doctor with special training and education in women's health.

Oocyte Cryopreservation: A procedure in which eggs are removed from a woman's ovaries and frozen for later use with in vitro fertilization (IVF).

Osteoporosis: A condition of thin bones that could allow them to break more easily.

Ovaries: The organs in women that contain the eggs necessary to get pregnant and make important hormones, such as estrogen, progesterone, and testosterone.

Radiation Therapy: Treatment with radiation.

Sexual Intercourse: The act of the penis of the male entering the vagina of the female. Also called "having sex" or "making love."

Tamoxifen: An estrogen-blocking medication sometimes used to treat breast cancer.

Uterus: A muscular organ in the female pelvis. During pregnancy this organ holds and nourishes the fetus.

This information was designed as an educational aid to patients and sets forth current information and opinions related to women's health. It is not intended as a statement of the standard of care, nor does it comprise all proper treatments or methods of care. It is not a substitute for a treating clinician's independent professional judgment. Please check for updates at www.acog.org to ensure accuracy.

Copyright October 2018 by the American College of Obstetricians and Gynecologists. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, posted on the internet, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the publisher.

This is EP198 in ACOG's Patient Education Pamphlet Series.

ISSN 1074-8601

American College of Obstetricians and Gynecologists
409 12th Street, SW
PO Box 96920
Washington, DC 20090-6920