

Anne E. Wilt
Editor



*Cancer Etiology,
Diagnosis and
Treatments*

Cancer Treatment

*Chemotherapy and
Radiation Therapy*

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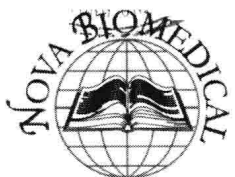
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CANCER ETIOLOGY, DIAGNOSIS AND TREATMENTS

CANCER TREATMENT

CHEMOTHERAPY AND RADIATION THERAPY



New York

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FROM A DECLARATION OF PARTICIPANTS JOINTLY ADOPTED BY A COMMITTEE OF THE AMERICAN BAR ASSOCIATION AND A COMMITTEE OF PUBLISHERS.

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CANCER ETIOLOGY, DIAGNOSIS AND TREATMENTS

CANCER TREATMENT

CHEMOTHERAPY AND RADIATION THERAPY

CANCER ETIOLOGY, DIAGNOSIS AND TREATMENTS

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PREFACE

Chemotherapy is a type of cancer treatment that uses drugs to destroy cancer cells. Chemotherapy works by stopping or slowing the growth of cancer cells, which grow and divide quickly. But it can also harm healthy cells that divide quickly, such as those that line your mouth and intestines or cause your hair to grow. Damage to healthy cells may cause side effects. Often, side effects get better or go away after chemotherapy is over. This book focuses on how patients undergoing chemotherapy can manage their side effects, which symptoms to watch out for, and how to communicate effectively with their health care team. Radiation therapy (also called radiotherapy) is a cancer treatment that uses high doses of radiation to kill cancer cells and stop them from spreading. At low doses, radiation is used as an x-ray to see inside your body and take pictures, such as x-rays of your teeth or broken bones. Radiation used in cancer treatment works in much the same way, except that it is given at higher doses. This book provides facts about radiation therapy and side effects and describes how patients can care for themselves during and after treatment.

Chapter 1 - Chemotherapy and You is written for you—someone who is about to receive or is now receiving chemotherapy for cancer. Your family, friends, and others close to you may also want to read this chapter.

This chapter is a guide you can refer to throughout your chemotherapy treatment. It includes facts about chemotherapy and its side effects and also highlights ways you can care for yourself before, during, and after treatment.

This chapter covers:

- Questions and answers about chemotherapy. Answers common questions, such as what chemotherapy is and how it affects cancer cells.

- Side effects and ways to manage them.
- Explains side effects and other problems that may result from chemotherapy. This section also has ways that you and your doctor or nurse can manage these side effects.
- Tips for meeting with your doctor or nurse.
- Includes questions for you to think about and discuss with your doctor, nurse, and others involved in your cancer care.
- Ways to learn more.
- Lists ways to get more information about chemotherapy and other topics discussed in this chapter—in print, online, and by telephone.
- Words to know.
- A dictionary that clearly explains all the words that are in bold in this chapter.

Talk with your doctor or nurse about what you can expect during chemotherapy.

Chapter 2 - Radiation Therapy and You is written for you—someone who is about to get or is now getting radiation therapy for cancer. People who are close to you may also find this chapter helpful.

This chapter is a guide that you can refer to throughout radiation therapy. It has facts about radiation therapy and side effects and describes how you can care for yourself during and after treatment.

This chapter covers:

- Questions and Answers About Radiation Therapy. Answers to common questions, such as what radiation therapy is and how it affects cancer cells.
- External Beam and Internal Radiation. Information about the two types of radiation therapy.
- Your Feelings During Radiation Therapy. Information about feelings, such as depression and anxiety, and ways to cope with them.
- Side Effects and Ways To Manage Them. A chart that shows problems that may happen as a result of treatment and ways you can help manage them.
- Questions To Ask. Questions for you to think about and discuss with your doctor, nurse, and others involved in your treatment and care.
- Lists of Foods and Liquids. Foods and drinks you can have during radiation therapy.

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- **Words To Know.** A dictionary that clearly explains medical terms used in this chapter. These terms are in bold print the first time they appear.
 - **Ways To Learn More.** Places to go for more information—in print, online (Internet), and by telephone.

Talk with your doctor and nurse about the information in this chapter. They may suggest that you read certain sections or follow some of the tips. Since radiation therapy affects people in different ways, they may also tell you that some of the information in this chapter is not right for you.

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Chapter 1

CHEMOTHERAPY AND YOU: SUPPORT FOR PEOPLE WITH CANCER^{*}

National Cancer Institute

ABOUT THIS CHAPTER

Chemotherapy and You is written for you—someone who is about to receive or is now receiving **chemotherapy** for cancer. Your family, friends, and others close to you may also want to read this chapter.

This chapter is a guide you can refer to throughout your chemotherapy treatment. It includes facts about chemotherapy and its **side effects** and also highlights ways you can care for yourself before, during, and after treatment.

This chapter covers:

- **Questions and answers about chemotherapy.** Answers common questions, such as what chemotherapy is and how it affects cancer cells.
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- Explains side effects and other problems that may result from chemotherapy. This section also has ways that you and your doctor or nurse can manage these side effects.
- **Tips for meeting with your doctor or nurse.**
- Includes questions for you to think about and discuss with your doctor, nurse, and others involved in your cancer care.
- **Ways to learn more.**
- Lists ways to get more information about chemotherapy and other topics discussed in this chapter—in print, online, and by telephone.
- **Words to know.**
- A dictionary that clearly explains all the words that are in bold in this chapter.

Talk with your doctor or nurse about what you can expect during chemotherapy.

QUESTIONS AND ANSWERS ABOUT CHEMOTHERAPY

What Is Chemotherapy?

Chemotherapy (also called chemo) is a type of cancer treatment that uses drugs to destroy cancer cells.

How Does Chemotherapy Work?

Chemotherapy works by stopping or slowing the growth of cancer cells, which grow and divide quickly. But it can also harm **healthy cells** that divide quickly, such as those that line your mouth and intestines or cause your hair to grow. Damage to healthy cells may cause side effects. Often, side effects get better or go away after chemotherapy is over.

What Does Chemotherapy Do?

Depending on your type of cancer and how advanced it is, chemotherapy can:

- **Cure cancer**—when chemotherapy destroys cancer cells to the point that your doctor can no longer detect them in your body and they will not grow back.
- **Control cancer**—when chemotherapy keeps cancer from spreading, slows its growth, or destroys cancer cells that have spread to other parts of your body.
- **Ease cancer symptoms** (also called **palliative care**)—when chemotherapy shrinks tumors that are causing pain or pressure.

How Is Chemotherapy Used?

Sometimes, chemotherapy is used as the only cancer treatment. But more often, you will get chemotherapy along with surgery, **radiation therapy**, or **biological therapy**. Chemotherapy can:

- Make a tumor smaller before surgery or radiation therapy. This is called **neo-adjuvant chemotherapy**.
- Destroy cancer cells that may remain after surgery or radiation therapy. This is called **adjuvant chemotherapy**.
- Help radiation therapy and biological therapy work better.
- Destroy cancer cells that have come back (**recurrent cancer**) or spread to other parts of your body (**metastatic cancer**).

How Does My Doctor Decide Which Chemotherapy Drugs to Use?

This choice depends on:

- The type of cancer you have. Some types of chemotherapy drugs are used for many types of cancer. Other drugs are used for just one or two types of cancer.
- Whether you have had chemotherapy before.
- Whether you have other health problems, such as diabetes or heart disease.

Where Do I Go for Chemotherapy?

You may receive chemotherapy during a hospital stay, at home, or in a doctor's office, clinic, or outpatient unit in a hospital (which means you do not have to stay overnight). No matter where you go for chemotherapy, your doctor and nurse will watch for side effects and make any needed drug changes.

How Often Will I Receive Chemotherapy?

Treatment schedules for chemotherapy vary widely. How often and how long you get chemotherapy depends on:

- Your type of cancer and how advanced it is
- The goals of treatment (whether chemotherapy is used to cure your cancer, control its growth, or ease the symptoms)
- The type of chemotherapy
- How your body reacts to chemotherapy

You may receive chemotherapy in cycles. A cycle is a period of chemotherapy treatment followed by a period of rest. For instance, you might receive 1 week of chemotherapy followed by 3 weeks of rest. These 4 weeks make up one cycle. The rest period gives your body a chance to build new healthy cells.

Can I Miss a Dose of Chemotherapy?

It is not good to skip a chemotherapy treatment. But sometimes your doctor or nurse may change your chemotherapy schedule. This can be due to side effects you are having. If this happens, your doctor or nurse will explain what to do and when to start treatment again.

How Is Chemotherapy Given?

Chemotherapy may be given in many ways.

- **Injection.** The chemotherapy is given by a shot in a muscle in your arm, thigh, or hip, or right under the skin in the fatty part of your arm, leg, or belly.
- **Intra-arterial (IA).** The chemotherapy goes directly into the artery that is feeding the cancer.
- **Intraperitoneal (IP).** The chemotherapy goes directly into the **peritoneal cavity** (the area that contains organs such as your intestines, stomach, liver, and ovaries).
- **Intravenous (IV).** The chemotherapy goes directly into a vein.
- **Topical.** The chemotherapy comes in a cream that you rub onto your skin.
- **Oral.** The chemotherapy comes in pills, capsules, or liquids that you swallow.

Things to Know About Getting Chemotherapy through an IV

Chemotherapy is often given through a thin needle that is placed in a vein on your hand or lower arm. Your nurse will put the needle in at the start of each treatment and remove it when treatment is over. Let your doctor or nurse know right away if you feel pain or burning while you are getting IV chemotherapy.

IV chemotherapy is often given through **catheters** or **ports**, sometimes with the help of a **pump**.

- **Catheters.** A catheter is a soft, thin tube. A surgeon places one end of the catheter in a large vein, often in your chest area. The other end of the catheter stays outside your body. Most catheters stay in place until all your chemotherapy treatments are done. Catheters can also be used for drugs other than chemotherapy and to draw blood. Be sure to watch for signs of infection around your catheter.
- **Ports.** A port is a small, round disc made of plastic or metal that is placed under your skin. A catheter connects the port to a large vein, most often in your chest. Your nurse can insert a needle into your port to give you chemotherapy or draw blood. This needle can be left in place for chemotherapy treatments that are given for more than 1 day. Be sure to watch for signs of infection around your port.
- **Pumps.** Pumps are often attached to catheters or ports. They control how much and how fast chemotherapy goes into a catheter or port.

Pumps can be internal or external. External pumps remain outside your body. Most people can carry these pumps with them. Internal pumps are placed under your skin during surgery.

How Will I Feel During Chemotherapy?

Chemotherapy affects people in different ways. How you feel depends on how healthy you are before treatment, your type of cancer, how advanced it is, the kind of chemotherapy you are getting, and the dose. Doctors and nurses cannot know for certain how you will feel during chemotherapy.

Some people do not feel well right after chemotherapy. The most common side effect is **fatigue**, feeling exhausted and worn out. You can prepare for fatigue by:

- Asking someone to drive you to and from chemotherapy
- Planning time to rest on the day of and day after chemotherapy
- Getting help with meals and childcare the day of and at least 1 day after chemotherapy

Can I Work during Chemotherapy?

Many people can work during chemotherapy, as long as they match their schedule to how they feel. Whether or not you can work may depend on what kind of work you do. If your job allows, you may want to see if you can work part-time or work from home on days you do not feel well.

Many employers are required by law to change your work schedule to meet your needs during cancer treatment. Talk with your employer about ways to adjust your work during chemotherapy. You can learn more about these laws by talking with a social worker.

Can I Take over-the-Counter and Prescription Drugs While I Get Chemotherapy?

This depends on the type of chemotherapy you get and the other types of drugs you plan to take. Take only drugs that are approved by your doctor or nurse. Tell your doctor or nurse about all the over-the-counter and prescription