



CANCERcare
Connect[®]

Living With Metastatic Prostate Cancer

Presented by

Susan F. Slovin, MD, PhD

Memorial Sloan-Kettering Cancer Center

Adam P. Dicker, MD, PhD

Jefferson Medical College

Carolyn Messner, DSW

CancerCare

Learn about:

- Treatment options
- Managing side effects
- New drugs on the horizon
- Your support team



CANCERcare[®]

Help and Hope



CANCER*care*[®]

CancerCare is a national nonprofit organization that provides free support services to anyone affected by cancer: people with cancer, caregivers, children, loved ones, and the bereaved. CancerCare programs—including counseling and support groups, education, financial assistance, and practical help—are provided by professional oncology social workers and are completely free of charge. Founded in 1944, CancerCare provided individual help to more than 100,000 people last year and had more than 1 million unique visitors to our websites. For more information, call 1-800-813-HOPE (4673) or visit www.cancercares.org.

Contacting CancerCare

National Office

CancerCare
275 Seventh Avenue
New York, NY 10001
Email: teled@cancercares.org

Administration

Tel: 212-712-8400
Fax: 212-712-8495
Email: info@cancercares.org
Website: www.cancercares.org

Services

Tel: 212-712-8080
1-800-813-HOPE (4673)

If you are a health care professional interested in ordering free copies of this booklet for your patients, please use the online order form on our website, www.cancercares.org.

Living With Metastatic Prostate Cancer

Presented by

Susan F. Slovin, MD, PhD

Associate Attending Physician, Genitourinary Oncology Service
Sidney Kimmel Center for the Treatment of Prostate and Urologic Cancers
Memorial Sloan-Kettering Cancer Center
Associate Professor of Medicine, Department of Medicine
Weill College of Cornell University
New York, New York

Adam P. Dicker, MD, PhD

Professor and Interim Chairman, Department of Radiation Oncology
Director, Christine Baxter Research Laboratory
for Experimental Cancer Therapeutics
Jefferson Medical College
Thomas Jefferson University
Philadelphia, Pennsylvania

Floyd Allen, MSW

Director of Men's Services
CancerCare

Carolyn Messner, DSW

Director of Education & Training
CancerCare

The information in this booklet is based on the CancerCare Connect® Telephone Education Workshop "Living With Metastatic Prostate Cancer," which took place in September 2008. The workshop was conducted by CancerCare in partnership with the American Cancer Society, American Pain Foundation, American Society of Clinical Oncology, Association of Clinicians for the Underserved, Association of Oncology Social Work, Black Women's Health Imperative, Cancer Patient Education Network, Education Network to Advance Cancer Clinical Trials, Intercultural Cancer Council, Malecare Prostate Cancer Support, Multinational Association of Supportive Care in Cancer, National Center for Frontier Communities, National Coalition for Cancer Survivorship, Pathways to Prevention, Prostate Cancer Foundation, The Prostate Net, Research Advocacy Network, Us TOO International Prostate Cancer Education & Support Network, and The Wellness Community.

INTRODUCTION

page 2

FREQUENTLY ASKED QUESTIONS

page 12

GLOSSARY (definitions of blue boldfaced words in the text)

page 14

RESOURCES

page 16

This patient booklet was made possible by an educational grant from sanofi-aventis U.S. LLC.

Men living with metastatic prostate cancer now have more treatment options available.

Cancer of the prostate gland is the most common cancer affecting men. Most of the time when prostate cancer is diagnosed and treated, the tumor is still confined to the gland. But when this cancer becomes **metastatic** and spreads to other parts of the body, treatment can stop cancer growth, control pain and other symptoms, and extend survival. In this way, prostate cancer is somewhat unusual compared with other types of cancers, which are more difficult to treat when they spread.

If a man has already been treated for prostate cancer with surgery or radiation, rising levels of **PSA** may indicate that his prostate cancer has returned.

(PSA refers to “prostate-specific antigen,” a protein produced by the prostate gland.) PSA may rise even though tests are unable to detect any obvious disease in the bone or other organs. For these men the disease is considered “micrometastatic,” meaning that cancer cells are believed to be present somewhere in the bloodstream, but they cannot be detected with the usual imaging tests.



Finding Metastatic Prostate Cancer

To determine whether prostate cancer has spread, doctors use a variety of tests, including **PSA** (prostate-specific antigen) measurements. They also use other methods, including x-rays of the bone, **CT scans** of the abdomen or the pelvis, and **MRI** scans.



Hormonal Treatments for Metastatic Prostate Cancer

The standard of care for treating metastatic prostate cancer is hormonal therapy. This type of treatment is aimed at lowering the production of testosterone and other male hormones. Testosterone acts like a fuel, encouraging prostate cancer to grow. Without testosterone and other male hormones, prostate cancer goes into **remission**—often for many years. Testosterone production can be reduced in different ways:

- **Injecting an LHRH analog or implanting it under the skin** These hormonal medications mimic a natural hormone that is secreted by the hypothalamus, a part of the brain that controls body temperature, hunger, thirst, and other functions. They can fool the body into shutting down testosterone production in the testicles. LHRH analogs include leuprolide (Eligard, Lupron, Viadur, and others), goserelin (Zoladex), triptorelin (Trelstar), and histrelin (Supprelin, Vantas). These injections and implants come in different preparations that last for one, two, four, six, and 12 months at a time.
- **Using a combined hormonal approach** Another way to block testosterone is with medications called

antiandrogens. Examples include flutamide (Eulexin and others), bicalutamide (Casodex and others), and nilutamide (Nilandron). Doctors give these pills in



combination with LHRH analog injections or implants to block the growth of prostate cancer cells fueled by male hormones. Antiandrogens are able to block testosterone produced by the adrenal glands and any other testosterone that was not already blocked by an LHRH analog.

An important note: Because one of the liver's important jobs is to break down medications as well as toxins in the body, it needs to be checked with periodic liver function blood tests, especially if you are taking antiandrogens. Tell your doctor immediately if you experience nausea, vomiting, stomach pain, excessive tiredness, loss of appetite, flu-like symptoms, dark yellow or brown urine, and/or yellowing of the skin or eyes. It's crucial to remember that herbal remedies, megadoses of vitamins, or excessive amounts of alcohol can prevent the liver from breaking down antiandrogens and can cause abnormal test results.

When first treated with hormonal therapy, metastatic prostate cancer usually responds to hormone treatments and goes into remission. But sometimes cancer cells can resist treatments. Prostate cancer cells can "learn" how to grow without male hormones. Doctors call this condition **hormone-refractory prostate cancer**.

In some cases of hormone-refractory prostate cancer, simply stopping antiandrogen treatment causes a man's PSA level

to go down and his prostate cancer to shrink or disappear. In other cases, doctors prescribe different antiandrogen drugs to try to slow cancer growth.

When to Consider Chemotherapy

Sometimes doctors recommend chemotherapy as a treatment for hormone-refractory prostate cancer. Doctors typically reserve chemotherapy for men who fall into one of three groups:

- **Those with fast-rising PSA levels** When the PSA level begins doubling or tripling so rapidly that hormone treatments can't control it, chemotherapy may be an option.
- **Those who are developing symptoms** If a man with metastatic prostate cancer is losing weight, looking pale, and experiencing physical distress, chemotherapy should be considered.
- **Those who have significant metastatic disease that is growing rapidly** Sometimes these men are treated with radiation aimed at multiple tumor sites. However, numerous radiation treatments to the bone can reduce the number of red blood cells in the bone marrow and can lead to anemia. Using chemotherapy reduces the need for radiation.



Docetaxel (Taxotere) in combination with prednisone is the standard chemotherapy that has been approved for use in men with hormone-refractory metastatic prostate cancer.

Mitoxantrone (Novantrone and others), another chemotherapy, has also been approved for these patients. Although this drug has not been shown to extend survival, it does improve pain control.

Treatments on the Horizon

Researchers are developing a number of new medications for the treatment of metastatic prostate cancer. Some of the most promising include:

- **Abiraterone** This drug works by blocking the hormones that fuel the growth of metastatic prostate cancer. Early clinical trials showed that abiraterone helped shrink metastatic prostate tumors and slowed their growth. Currently, abiraterone is being studied in a large multi-center clinical trial.
- **MDV3100** This new drug has been shown to help stall the growth of metastatic prostate cancer in men whose tumors resist treatment with standard hormonal therapy.
- **Ipilimumab (MDX-010)** In clinical trials, this drug has been shown to be effective in men whose metastatic prostate cancer does not respond to hormonal treatment or chemotherapy. Ipilimumab blocks a molecule that reduces the immune system's ability to kill tumors, including metastatic prostate cancer cells. By blocking this molecule, ipilimumab helps restore the ability of the immune system to destroy tumors.
- **Bisphosphonates** Because lowered testosterone levels lead to a loss of calcium in the bones, which weakens them, doctors often give drugs called **bisphosphonates** to men with metastatic prostate cancer. Bisphosphonates help manage bone pain and minimize the risk of fractures to the hip and spine. Some research suggests that combining bisphosphonates with the drug leuprolide may benefit men with metastatic prostate cancer. These medications are approved for men whose metastatic prostate cancer does not respond to first-time hormonal therapy.

The Importance of Clinical Trials

There's no question that clinical trials have led to advances in cancer treatment, creating a brighter future for people with cancer. Clinical trials are the standard by which we measure the worth of new treatments and the quality of life of patients as they go through those treatments. For this reason, doctors and researchers urge people with cancer to take part in clinical trials.

Your doctor can guide you in making a decision about whether a clinical trial is right for you. Here are a few things you should know:

- Often, people who take part in clinical trials gain access to and benefit from new treatments.
- Before you participate in a clinical trial, you will be fully informed as to the risks and benefits of the trial.
- Most clinical trials are designed to test a new treatment against a standard treatment to find out whether the new treatment has any added benefit.
- You can stop taking part in a clinical trial at any time for any reason.

For more information on these and other clinical trials for prostate cancer, go to www.clinicaltrials.gov.

Managing Side Effects

It's important to talk with your doctor about the possible side effects of prostate cancer and its treatment. Members of your health care team can help you reduce and manage these symptoms to improve your quality of life.

Pain Prostate cancer that spreads to the bone can lead to pain. Medications such as bisphosphonates help relieve some of this pain. In addition, radiation is often used to manage bone pain.

Let's Talk About Pain

Many men believe they shouldn't complain about pain—that they should be able to “just grin and bear it.” But there is something you should know: pain stresses your body and takes a toll on your spirit. It can cause you to feel sad, worried, or angry, for example. Proper management of your pain can improve your quality of life. Talk with your doctor about forming a good pain management team.

Men with metastatic prostate cancer typically receive 15- to 20-minute daily radiation treatments for about two weeks. It usually takes a week before the pain and discomfort begin to ease.

There are several types of radiation used, including **external beam radiation**, **intensity-modulated radiation**, and **radioactive isotopes**.

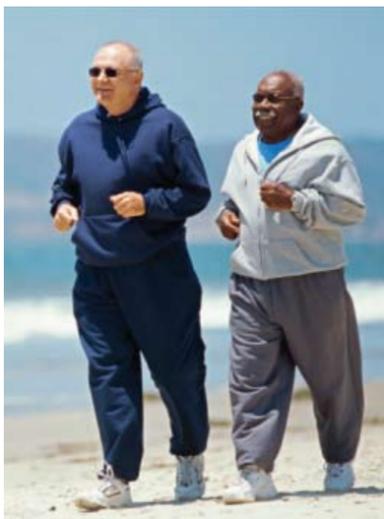
Hot flashes In most men treated with hormonal therapy for their metastatic prostate cancer, hot flashes are fairly limited. If you are especially troubled by hot flashes, ask your doctor about medications such as low doses of female hormones (estrogen or progesterone) that can help.

Osteoporosis (increased risk of bone fractures) Lowered testosterone leads to a loss of calcium, which may cause osteoporosis. Treatment with bisphosphonates can help reverse the effects of osteoporosis. This is especially important to reduce bone pain as well as the risk of fractures to bones, including the hip and spine.

Loss of erections (erectile dysfunction) Sometimes men experience erectile dysfunction when being treated for prostate cancer. If you are experiencing this side effect, discuss your concerns with your doctor. He or she will be able to recommend a number of possible treatments and can consult with other members of your team to assist you. Some approaches used to manage this side effect include:

- A drug such as sildenafil (Viagra and others), vardenafil (Levitra), or tadalafil (Cialis) can improve erections for some men.
- A penile implant that makes it possible to have and keep an erection. This approach involves surgery.
- **Urethral suppositories** or injections of prostaglandin E1 (alprostadil) to promote erections.
- Vacuum devices that draw blood into the penis for an erection.

Weight gain When men's testosterone levels go down, their metabolism can change, causing them to retain fluid and gain weight. Hormone treatments can result in a loss of muscle mass. Stay active by walking, doing chores, and engaging in physical activities you enjoy. Weight training can also help build and maintain muscle strength and structure.



Fatigue Some days you may feel so tired that even simple daily activities leave you exhausted. But over time, light physical activity or gentle exercise—short walks building up to longer walks—goes a long way toward helping relieve fatigue. Taking 30-minute “power naps” during the day can also help. These naps give you a boost without disrupting your sleep schedule.

Making Decisions

As someone living with metastatic prostate cancer, the decisions you make may have a major impact on your life. To make the decision-making process easier, consider the following:

- **Choose a physician you're comfortable with.** Make sure he or she specializes in your type of cancer.
- **Ask questions until you get the answers you need.** Be assertive and persistent about getting a clear understanding of your options and possible outcomes.
- **Know what to expect.** Discuss treatment goals with your doctor and make sure you are aware of possible side effects and how to manage them.
- **Review your financial situation.** Determine whether you need help with the costs of treatment or other related expenses, such as transportation, home care, child care, and travel to and from treatment.
- **Make sure you have the support you need.** Review your support network of family and friends, health care providers, and organizations such as CancerCare®. In the next section, we talk more about the importance of support and how we can help.

Your Support Team

When you are diagnosed with metastatic prostate cancer, it can be disorienting, stressful, or even overwhelming for men and their loved ones. You may not be sure where to turn. But help is available. Your health care team, family members, and friends will likely be an invaluable source of support at this time. You can also turn to these resources:

Oncology social workers provide emotional support for people with cancer and their loved ones. These professionals can help you cope with the challenges of living with metastatic prostate cancer and guide you to resources. CancerCare offers free counseling from professional oncology social workers on staff who understand the challenges faced by men living with metastatic prostate cancer and who can focus on assisting you with the impact and effects of the diagnosis. We can work with you one-on-one to develop strategies for coping.

Support groups Many support groups are available for men living with metastatic prostate cancer. Support groups provide a caring environment in which you can share your concerns with others in similar circumstances. Support group members come together to help one another, providing insights and practical suggestions on ways to cope. At CancerCare, men living with metastatic prostate cancer, as well as family members and caregivers, can take part in support groups in person, online, or on the telephone.



Financial help is offered by a number of organizations, including CancerCare, to help cover cancer-related costs such as transportation to treatment, child care, or help needed around the home. CancerCare also provides referrals to other organizations that provide assistance.

To learn more about how CancerCare helps, call us at 1-800-813-HOPE (4673) or visit www.cancercare.org.

Frequently Asked Questions

Q I find hormonal therapy very difficult, emotionally. I've read that this reaction might be related to a lack of estrogen. If that's the case, why aren't estrogen patches used more widely?

A There is some suggestion that lowered estrogen could have something to do with your difficulties. But using a patch could create its own problems. For instance, estrogen can lead to fluid retention, congestive heart failure, and an increased risk of blood clots. A lower dose of estrogen would be safer but also less effective. This is why estrogen patches and supplements aren't used as much as they have been in the past. You might consider individual counseling, which helps many people cope with the emotional challenges raised by cancer and its treatment.

Q Is it appropriate to have radiation treatment for metastatic prostate cancer even though I was already treated with radiation before the cancer metastasized?

A In general, if you have already had radiation to the pelvis near the prostate gland, more radiation to that area would not be recommended. But if you develop a problem such as pain in the bones of the arms, legs, or spine, and those areas have not been exposed to radiation before, you most likely could be treated with radiation to those areas.

Q When prostate cancer metastasizes, does the PSA level go up?

A In general, higher-than-normal PSA levels signal that something has changed in the prostate gland. If a man has been treated for prostate cancer with surgical removal of the gland, most physicians believe that PSA levels should be very low—that is, less than 0.2 nanograms per milliliter (ng/mL) of blood. If the PSA number goes up during two consecutive readings after surgery, it may mean that prostate cancer has returned. In men who have been treated with radiation, doctors look for three consecutive rises in the PSA number. They may also order other tests to further evaluate the situation.

Q Can I continue to do exercise, like brisk walking, when I am treated for metastatic prostate cancer?

A It's certainly a good idea to engage in as much physical activity as is comfortable. Exercise helps promote heart health and can relieve stress and fatigue. In general, activities like walking or swimming are preferable to high-impact activities, such as jogging. Men who are having a difficult time finding an exercise routine that works for them should seek the help of a physical therapist or rehabilitation specialist.

Glossary

antiandrogens Drugs that block the actions of testosterone and other male hormones on the prostate gland and other organs. Testosterone can fuel the growth of prostate cancer.

bisphosphonates Drugs that can be used to maintain bone health in men with prostate cancer who are receiving hormonal therapy.

CT scan A type of x-ray used to help detect the spread of cancer or track the progress of treatment.

external-beam radiation A beam of radiation is directed to the area of the bone that is causing pain. Treatments usually take 15 to 20 minutes, given daily for about two weeks. The radiation shrinks the tumor from the bone, providing relief. Side effects of this type of treatment depend on where the beam is pointed. For example, radiation to the spine, if given near the stomach, may cause stomach upset. Fatigue also is a common side effect of this treatment.

hormone-refractory prostate cancer When prostate cancer cells resist hormone treatments and “learn” to grow without male hormones.

intensity-modulated radiation For this treatment, a computer-controlled machine revolves around the patient while delivering radiation. This allows the radiation to be aimed at the prostate tumor from various angles. The intensity, or strength, of the beams can also be adjusted to deliver the highest doses of radiation to the areas of the body with cancer.

LHRH analog Stands for luteinizing (LOO-tee-in-iz-ing) hormone-releasing hormone analog (copicat), a drug that prevents the production of testosterone in the testicles.

metastatic A tumor that has spread to distant parts of the body.

MRI (magnetic resonance imaging) A procedure that uses radio waves and a powerful magnet linked to a computer to create detailed images of internal organs.

PSA refers to “prostate-specific antigen,” a protein produced by the prostate gland. High blood levels of PSA may indicate the presence of prostate cancer. Generally, levels under four nanograms per milliliter (ng/mL) of blood (a very tiny amount) are considered normal.

radioactive isotopes This type of radiation treats the whole body. The patient receives an injection of an isotope (atoms that emit radiation) that zeroes in on areas of the bone where prostate cancer most frequently spreads. Over the course of a week or two, the isotope treats the bone and the tumor that resides in the bone. However, this type of treatment often affects the ability of the bone marrow to produce blood cells.

remission When cancer responds to treatment or is under control. In a complete remission, all the signs and symptoms of the disease disappear. In a partial remission, the cancer shrinks but does not completely disappear.

urethral suppository A medicated solid preparation, usually in the form of a small cylinder or cone, that melts at body temperature and is designed to be inserted into the urethra, or urinary tube, where it releases medication.

Resources

CancerCare®

1-800-813-HOPE (4673)

www.cancercares.org

American Cancer Society

1-800-227-2345

www.cancer.org

Cancer.Net

Patient website of the American Society of Clinical Oncology

www.cancer.net

National Cancer Institute

Cancer Information Service

1-800-422-6237

www.cancer.gov

Prostate Cancer Foundation

1-800-757-2873

www.prostatecancerfoundation.org

The Prostate Net

1-888-477-6763

www.prostate-online.org

Us TOO International Prostate Cancer Education & Support Network

1-800-808-7866

www.ustoo.com

The Wellness Community

1-888-793-9355

www.thewellnesscommunity.org



CANCER*care*[®]

The information presented in this patient booklet is provided for your general information only. It is not intended as medical advice and should not be relied upon as a substitute for consultations with qualified health professionals who are aware of your specific situation. We encourage you to take information and questions back to your individual health care provider as a way of creating a dialogue and partnership about your cancer and your treatment.

All people depicted in the photographs in this booklet are models and are used for illustrative purposes only.

This booklet was edited and produced by Elsevier Oncology.

© 2009 Cancer Care, Inc. All rights reserved.

When one word changes your world,

CANCERcare®

makes all the difference



With CancerCare,
the difference comes from:

- Professional oncology social workers
- Free counseling for you and your loved ones
- Education and practical help
- Up-to-date information

Our trusted team of professionally trained oncology social workers provides free counseling, education and practical help for you and your loved ones.



CANCERcare®

Help and Hope

1-800-813-HOPE (4673)

www.cancercares.org