

Chapter One An Overview

Drs. Aubrey Pilgrim and E. David Crawford

Treatment Options

If you have been diagnosed with prostate cancer, you will have several treatment options. The doctor has several tools to help make the diagnosis, such as a digital rectal exam, the PSA blood test, ultrasound images and several other tests. These tests and his expertise will help to assign a clinical stage (CS) to the cancer. The diagnosis may help you determine what treatment to choose.

Treatments that you may consider include watchful waiting, surgery or radical prostatectomy, radiation, including external beam and seed implants, cryosurgery, hormones and chemotherapy. Depending on several factors, combinations of the treatments may be necessary. For instance, external beam radiation or hormone treatments may be added or combined with any of the primary treatments. Your doctor may recommend the treatment, but it is your body and it is your choice as to what treatment you want. It should be an informed choice. This book can help you make an informed choice.

You could choose any of these treatments. But depending on your age, health and life expectancy, some treatments may be preferable to the others. Other factors that may influence your decision is the PSA number and the Gleason score.

Those men whose prostate cancer is detected before it has a chance to escape the prostate gland capsule have more treatment choices. They can be treated and usually cured. But once the cancer has escaped the prostate and become advanced, it can be treated, but may not be cured.

Watchful Waiting

An older person with a fairly short life expectancy might choose Watchful Waiting. This might be a good choice for anyone with a low PSA and low grade tumor. The PSA level would be often checked and if it appeared that the cancer was changing, then other treatment could be chosen. Remember that watchful waiting is taking the chance that you will die of something else other than prostate cancer. Most cancers will progress, but at different rates.

Radical Prostatectomy

A radical prostatectomy is the “gold standard” and is performed more often than any other procedure. If the cancer is still confined to the prostate, a radical prostatectomy would completely remove all of the cancer cells. Usually, a radical prostatectomy is recommended for younger men in their late forties or fifties, who have a fairly long life expectancy.

A disadvantage is that a radical prostatectomy is a major operation. A small percentage of men are left with incontinence and many have impotence problems or erectile dysfunction (ED). And even with the most expert surgeon, there is a chance that some of the cancer cells may have already escaped and the cancer may recur. After a radical prostatectomy, the PSA should be undetectable. If it is detected it would indicate that the cancer has recurred. In some cases, radiation may be used in addition to the surgery. Hormone therapy may also be used before and after surgery.

Radiation

Radiation is usually not as traumatic as surgery. Some data for radiation seems to indicate that it may be equivalent to surgery or any of the other treatments. If you are an older man you might choose some form of radiation. This might also be a better choice for a person in poor health who might not be able to withstand the trauma of a major operation such as a radical prostatectomy. There may be a lesser incidence of incontinence and impotence with radiation. However both of these can occur with this treatment.

One disadvantage is that radiation may not kill all of the cancer cells. If any are left behind, the cancer may recur. If you are fairly old, leaving a few cells may not be that bad. It may take ten to twenty years for a cancer to become significant. If your life expectancy is less than that, why worry.

There are several different types of radiation such as conventional x-rays, 3D conformal, Proton Beam, and seed implants. Brachytherapy, or seed implants, is the placement of radioactive "seeds", about the size of a small grain of rice, in the prostate. We only have data for seed implant treatment over the last 12 years. It appears to be as effective as any of the other treatments with less side effects. However, the jury is still out on its long term cure rates.

If the cancer recurs and the PSA rises after radiation, hormone therapy may be instituted.

Cryosurgery

Cryosurgery uses probes inserted into the prostate to freeze the cancer cells. It is also fairly new. It has some promising results over the last ten years, but it does have some undesirable side effects such as impotence.

If the PSA rises after cryosurgery, hormone therapy or radiation may be necessary.

Hormones

At one time hormone therapy was reserved almost exclusively for advanced cancers. Now many men with localized, low grade cancer are being treated with hormones. The antiandrogen monotherapy is one of the least invasive of all treatments. This drug treatment can often stop the tumor growth in the less aggressive type cancers.

If there is an indication that the cancer has advanced beyond the prostate or metastasized, hormone therapy would be the treatment choice. Prostate cancer cells thrive on testosterone from the testicles and androgenic hormones from the adrenal glands. The cancer progression can be slowed or stopped by preventing or blocking the production of these hormones. One way to block the testosterone is to have an orchiectomy, a nice way of saying castration. There are certain drugs that can block the production of testosterone just as if one has been castrated. There are also synthetic drugs such as Casodex and Flutamide that mimic the adrenal androgens. If the receptors of the cancer cells accept these synthetic drugs, then the actual androgens are blocked.

One disadvantage of castration and hormone therapy is that it can completely eliminate the libido and the person may lose all interest in sex. He may also have hot flashes, his breasts may become enlarged (gynecomastia), and he may feel tired and weak. However considering that metastatic cancer can kill one, most men will gladly suffer the side effects of hormone therapy.

Chemotherapy

In some men the combined hormone therapy (CHT) may only work for a few years before the cancer cells become refractory, that is, they learn to live without the hormones. When this happens, there are other drugs and chemotherapies that can be instituted.

Chemotherapy is usually reserved for the treatment of last resort. Although, a number of new regimens have been developed which offer new hope in controlling the disease. Because of these promising results, chemotherapy is being used earlier in the disease. Dr. Maha Hussain, an oncologist, recommends that it be used early instead of using it as a last resort. She rationalizes that the chemotherapy may inhibit or prevent many of the hormone independent cells from proliferating.

Trying to Identify the Killers

There are several tests that can help try to determine which cancers are killers and which are harmless. One important test is to make a PSA chart to see if there are any active changes. If the PSA number begins to go up, then it may indicate that the cancer is growing. The normal PSA for a man in his 50's may be 0 to 4 nanograms per milliliter (ng/ml); for a 70 year old man a PSA of 5 ng/ml may be normal. Some men who have computers have used spreadsheet programs to track their PSA and history.

Generally, for those men who have a significant cancer that is still confined to the prostate, the PSA may be 2.5 to 20 ng/ml. However, the risk of spread outside the prostate may be nearly 50% if the PSA is greater than 10ng/ml. If the cancer has metastasized, the PSA may be from 20 ng/ml up to 6000 ng/ml or more.

Ordinarily, since each cancer cell produces a finite amount of PSA, the amount of PSA is a fairly good indication of how much cancer is present. But remember, the first rule is that there are no rules when it comes to cancer.

Some men may have very aggressive life threatening cancer but the PSA may be very low. It could be that the cancer cells have mutated to the point where they can no longer produce PSA.

Digital rectal examinations

Digital Rectal Examinations (DRE) and ultrasound can also be used to periodically check for changes. The doctor may be able to feel any new growth or lumps in the prostate. Any such findings could indicate an aggressive cancer.

Metastasis

If the cancer has metastasized, it often starts new colonies of prostate cancer in other parts of the body and often in the bones. A bone scan can identify these colonies in the bones. They can be seen as “hot spots” on special x-rays.

ProstaScint is a fairly new test that uses monoclonal antibodies that are specific for prostate cells. The antibodies are tagged with a radioactive material then injected into the body. The antibodies will seek out and accumulate in prostate tissues. A scanning device can then locate the radioactive cells. If there is an accumulation of cells outside the prostate, then you know that there is metastasis.

After Effects of Treatment

When discovered before it metastasizes to the rest of the body, the cancer can usually be successfully treated. Even if it has metastasized, you can still be treated and your life can usually be extended. However, you should know that for most treatments there will be some side effects. After the treatments your life will be changed forever to some degree. Depending on the treatment, you may have some degree of incontinence.

You may or may not be able to achieve an erection. If you have a radical prostatectomy, you will never be able to ejaculate again. Orgasms and ejaculation are two separate things. If you could have orgasms before the operation, you will still be able to have orgasms after. It won't be quite the same, but you will still be alive and can expect to live a fairly normal lifespan. You might even live longer than a person who has never had prostate cancer because you may wake up and start taking better care of yourself.

Educate Yourself

There are a few doctors who recommend that the prostate should be removed or irradiated, no matter what the stage or significance. For some patients, the cancer may not be a threat. Unfortunately, we have no absolute way to determine which cancers are insignificant and which are the ones that can kill

you. There are some statistics that can help such as the Partin Tables and the Artificial Neural Network (ANN). They will be discussed in Chapter 6. By studying these tables and statistics you can get a fairly good idea of what kind of treatment you should have.

For those men whose cancer has metastasized and escaped the prostate, removal of the prostate may not help them. However, some doctors do remove the prostate even when metastasis is evident. They do this to debulk the tumor and ease the burden on the body. Not everyone agrees that this is helpful.

Usually if there is evidence of metastases, the men may be treated with drugs, radiation, chemotherapy, hormones or by castration. Even if there is widespread metastases, with proper treatments, many men are able to live for several years. If some other disease does not kill the man, eventually the metastatic cancer will. At the present time we have few cures for any kind of cancer that has metastasized be it prostate, breast, colon, lung or whatever. We can only try to slow the growth of the cancer and alleviate any pain. This does not mean that anyone should give up hope. With proper treatment and care, many men survive as long as those without cancer.

Prostate Cancer Now Number One

About 180,000 men were diagnosed with prostate cancer this year. It has now surpassed lung cancer as the number one diagnosed cancer in men. Lung cancer is still the number one killer. Counting men and women, lung cancer kills about 150,000 people each year. Prostate cancer kills between 30,000 and 40,000 men each year.

One reason that prostate cancer is now the number one diagnosed cancer is because more and more men are being checked for prostate cancer. The simple prostate specific antigen (PSA) blood test and ultrasound, added to the standard digital rectal exam (DRE), makes it much easier to detect prostate cancer while it is still in the early stages.

If a man gets lung cancer because he smokes, he usually has no one to blame but himself. But if he gets prostate cancer it may not be his fault. We don't know exactly what causes it. If a man lives past 80 years old, there is about an 80 percent chance that he will have prostate cancer to some degree. At this age though, he will probably die of some other cause before the prostate cancer kills him. If he lives to be 100 years old, the chances that he has prostate cancer is about 100 percent.

Dr. Linus Pauling was diagnosed with prostate cancer at 92 years old. A reporter asked him why his Vitamin C intake did not protect him. He said, "Had I not been taking Vitamin C, I might have got prostate cancer 40 years ago." Dr. Pauling died from prostate cancer a little over a year later at 93 years old. Dr. Pauling

was the only person who ever received two Nobel prizes in his own name, one for chemistry and one for peace.

From autopsies done on young men 20 to 30 years old who died in accidents, war or other causes, about 30% of them have a small beginning prostate cancer tumor. About 38% of those who were 30 to 40 at the time of death had small cancerous tumors. Most of those cancers would have never been a threat. The challenge is trying to detect and treat the bad ones.

Symptoms

There may be no symptoms. Dr. Robert Kelly, a medical doctor in his early 50s belongs to one of our local prostate cancer support groups in the Los Angeles area. He had no symptoms when his prostate cancer was first detected. It had spread throughout his body. A normal PSA for a man his age should be less than 4 ng/ml. His PSA was over 524 ng/ml. He has had several hormonal and chemotherapy treatments and is still doing well 9 years later.

Here are a few symptoms that you may experience:

A small urine stream, hesitancy, having to go a lot during the day, having to get up several times at night, any kind of pain in your back or pelvic area.

Almost everybody has back pain now and then due to straining a muscle or other injury. If the cancer escapes the prostate gland, it often invades the bones of the spine or the pelvis. It may cause severe pain that is quite different than the pain from a strained muscle.

Again, and again, there are no rules, so you may have no symptoms. Prostate cancer can truly be a silent killer.

Second Opinions

If you have had a PSA test and a biopsy that clearly shows cancer, it may not be much help to get a second opinion. It will probably be the same as the first one. Even if you get a third or fourth opinion, it may still be about the same as the first one, but do it anyway. It may help you make a better decision as to your treatment. If you don't make an effort to learn all you can before making a decision, you may later feel that it wasn't the better decision. Remember that you will have to live with whatever treatment decision you make for the rest of your life. It should be an informed decision.

Be aware that if you ask several doctors as to what treatment you should have, you may get several different opinions.

It may be in your best interests to get a second opinion from a Cancer Center where a multidisciplinary team will evaluate your disease. Many such centers have a second opinion clinic which is staffed by specialist in the fields of Urology,

Radiation Oncology, and Medical Oncology. Take your time. Remember that most prostate cancers grow fairly slow. It may have taken 10 years or more for your prostate cancer to have become clinically evident so you are not going to die overnight.

In most cases you can wait a couple of months or more, depending on your PSA, your Gleason score, your age, and several other factors, before making such an important decision.

Choose The Best Doctor

If you must have surgery, technically, any medical doctor could operate on you. But you want an experienced urological surgeon. Try to make sure that you have the best doctor. Talk to some of his patients, nurses and other doctors. Find out how many operations he has performed. Usually, the more procedures a doctor has performed, the more skilled he or she is.

Even if it costs you extra to get a better and more experienced doctor, remember that it is only money. If you don't take the time to find a good doctor, you may regret it the rest of your life. Your quality of life may be diminished for the rest of your life.

Money becomes quite insignificant when you consider the consequences. If you don't have the money, then explore every way possible of getting the treatment your life deserves. Join a support group. Buy a computer and go on-line. Try the community services and hospitals. Contact the American Cancer Society for help. Check the Resources listed in the back of this book.

No matter what treatment you choose, do your homework. Find out all you can about the doctor. Talk to his patients and anyone else who knows him. Don't be embarrassed, or afraid that you will hurt the doctor's feelings. After all it is your life and the quality of your life for the rest of your life that is at stake.

Facing the Inevitable

Something that we may not like to confront is a discussion of end of life decisions. We never know when our time will come. Many hospitals now provide an "advanced directive" or "living will" for the patient to sign. California and many other States, have a "Durable Power of Attorney". Among other things, it allows you to name a relative or friend to act and make medical decisions in your behalf if you become unable to do so. In the vast majority of cases, these papers will not be needed, but just in case, signing the paper could save a lot of problems for your loved ones.

Beware of Quackery

If you have been diagnosed with prostate cancer, you may panic and start reaching out for any kind of treatment or drug that might help you. There is no need to panic and rush into anything. You have time to make the best decisions.

There are many charlatans, quacks and absolutely unscrupulous and dishonest people who will try to get their hands in your pockets. They have no morals or any conscience. They prey on sick people and will take advantage of you and your condition if you let them. There are many men whose cancer is no longer responding to treatments. These men may reach out for any hope, for anything at all that might help them. No one can blame them for trying. But we can blame the charlatans and quacks who knowingly offer them false hope.

We will have more to say about quackery in Chapter 20.

Medical Miranda

Dr. Stephen Strum, is a medical oncologist and founder of the Prostate Cancer Research Institute. He specializes in prostate cancer treatments. He developed a Medical Miranda, such as the one read to criminal suspects when they are arrested. His Medical Miranda says:

“You have the right to know your diagnosis,
You have the right to understand the principles of evaluation and treatment,
You have the right to be familiar with the pros and cons of available treatment options.”

There is at least one other right that we would add:

“You have the right to choose whatever treatment you want.”

There are a large number of different treatments and methods of treatments for prostate cancer. The treatment that you receive will be your choice. Most doctors will make a recommendation for treatment, but the ultimate choice will be yours to make. Most of the major treatment options are quite similar in outcomes. Unfortunately, if your cancer was not discovered before it metastasized, your choices of treatment may be limited.

The answer to cancer is early detection.