

TREATMENT OPTIONS FOR STAGE D PROSTATE CANCER

D1 Prostate Cancer is one that has spread to the lymph nodes in the pelvic region. No matter how little or how big the cancer has gotten in the prostate itself, spread to the lymph nodes nearby means that you have Stage D1 disease.

D2 Prostate Cancer is one that has spread beyond the pelvic lymph nodes to any other body organ (such as bone, lung, liver) or to lymph nodes that are above the pelvic area.

Your treatment depends on whether you have stage D1 or stage D2 prostate cancer. If you have stage D1 cancer, your treatment may be one of the following: (in no particular order of preference)

1. Hormone therapy.
2. External radiation therapy. Clinical trials are testing new forms of radiation. Hormone therapy may be given in addition to radiation.
3. Clinical trials of surgery to remove the prostate and the tissue around it (radical prostatectomy) and surgery to remove the testicles (orchiectomy).
4. If you are older or have another more serious illness, your doctor may follow you closely without treatment. Your doctor may choose this option for you because your cancer is not causing any symptoms or other problems and may be growing slowly.
5. Your doctor may follow you closely and wait until you develop symptoms before giving you treatment.

If you have stage D2 disease, your treatment may be one of the following:

1. Hormone therapy.
2. External beam radiation therapy to relieve symptoms or urinary blockage or bleeding.
3. Surgery to cut some of the cancer from the prostate using a telescopic knife that is put into the prostate through the urethra (transurethral resection) to relieve symptoms of urinary blockage.
4. A clinical trial of chemotherapy or new forms of hormone therapy.
5. Your doctor may follow you closely and wait until you develop symptoms before giving you treatment.

DESCRIPTION OF THE MORE COMMON TREATMENTS FOR STAGE D CANCER

Orchiectomy

The testicles manufacture almost all of the male hormones. Therefore, removal of both testicles lowers the hormone levels sufficiently to often achieve an excellent response against the prostate cancer. The procedure requires a brief anesthetic (general, spinal or local) and usually requires less than 30 minutes to perform. In most instances, the patient goes home from the hospital on the same day. There is some discomfort that is usually treated with a mild pain medication and a few days of restricted activity. A small chance of infection exists, along with the risks associated with the anesthesia. Prosthetic implants can be placed, if so desired.

The side effects of removal of the testicles are mild in most cases. The most problematic are 'hot flashes'. Because of the abruptness of the hormone changes, some men will have 'hot flashes', which consist of brief episodes of feeling of warmth, sweating and redness, especially of the face. Rarely, these can come so often that we need to offer medication to try to reduce their effects. Usually the flashes are not so bad and as time progresses, their effect wears off and even disappears.

Hormonal Injections (Lupron or Zolodex)

These are long-acting injectable drugs that act by turning off the testicles' ability to make male hormones. The action of the drug is actually on the pituitary gland in the brain, which makes a special hormone that stimulates the testicles to release testosterone. Kind of complicated, but in the end, the testicle does not make any significant amount of hormone, just as if the testicles had been removed. The injections have no direct effect on the cancer, only an effect on the testicles. The lack of male hormone circulating in the blood treats the prostate cancer. The major advantage is no need for surgical removal of the testicles. The disadvantages are the need for a monthly (or every three months) injection--forever!!, and the high cost of the medication which may be as high as \$600 per injection. In almost all cases, one's insurance covers these costs, but in this day of trying to reduce costs, the shots are more expensive than the surgery. Allergic reactions can occur and a rare case of arthritis may be seen. Otherwise the shots are identical to the removal of the testicles, including the aforementioned 'hot flashes'.

Intermittent hormone therapy

We are currently investigating intermittent hormone therapy. Intermittent hormone therapy is a treatment regimen where hormone therapy is started and when the cancer shrinks to a certain level as measured by the PSA, we stop the hormone therapy. Treatment is re-started when the cancer grows again (as measured by PSA). The advantage of intermittent hormone therapy is a reduction in the side effects of the hormone therapy during the periods that the patient is off treatment and reduced overall costs. Early studies have suggested that success in treating the cancer is not hurt by using intermittent therapy. Intermittent therapy is still investigational.

Female Hormones

Until the mid 1980s, female hormones in pill form, particularly Stilbesterol, were used to treat prostate cancer. Female hormones act on the male pituitary gland in the brain to reduce the release of a special pituitary hormone that stimulates the testicles to release testosterone. Female hormones had the advantage of requiring only a daily pill to take, but has the disadvantage of increased risks of heart attack and stroke and also caused painful breast enlargement in many men. We still use female hormones to reduce the effects of hot flashes in some men, and occasionally in men whose tumors have started to grow again despite the hormone treatments.

Additional Hormone Therapy

Many studies have suggested that the addition of another type of medicine called antiandrogens may help potentiate the effectiveness of either hormone injections or removal of the testicles. The most common ones used are called flutamide (Eulixen) or bicalutamide (Casodex). These drugs, taken in pill form, further reduce the hormone levels by blocking the action of remaining male hormones (mostly made in the adrenal glands). Some controversy still exists as to the effectiveness of this additional treatment and the cost is about \$300 per month, and many insurance companies including Medicare will not pay for them. A certain percentage of men will have some reaction to the medication, particularly diarrhea (more common in flutamide than bicalutamide). The symptoms resolve in time or the dosage can be reduced. At this time, we

suggest that flutamide or bicalutamide be used, IF the cost of the medicine will not be a burden and the side effects are minimal. Remember, its usefulness is still not a certainty to all investigators, so that if you do not use antiandrogens, you shouldn't feel that you are getting inferior or substandard treatment.

Chemotherapy for prostate cancer

Not all patients will respond to hormone treatments and some patients that have responded to hormone treatments for prostate cancer can become resistant so that the cancer will once again grow. Prostate cancer can recur at any place, but bones are the most common place and therefore bone pain is the first symptom that usually develops. PSA is often the first sign of regrowth of the cancer, but the PSA rise will not tell where the recurrence might be, only that it exists. If the recurrence can be identified before pain begins radiation therapy can be used to treat specific areas with excellent control rates. Standard medical chemotherapy can be used with drugs such as Cytosan, 5-FU, cis-platinum and doxorubicin. These are very potent chemicals that are given in many different settings and for other types of cancers as well. The drugs can be given alone or in various combinations and can be effective in relieving the bone pain. Another drug called Suramin is being studied and may cause responses in patients who have not had good results with the drugs listed above.

In some patients high doses of Prednisone, which is a steroid similar to cortisone, can produce a mild improvement, but steroids need to be taken with caution if given for extended periods.

Radiation therapy is often effective in decreasing pain if the area has not previously been treated, and the area of pain can be isolated so the x-ray beam can be aimed. This is particularly helpful in preventing fractures of involved weight-bearing joints such as the hips or spine. Another new development is the use of Strontium-90, a radioactive drug that reduces bone pain.

Let us know if you have any questions or concerns and we'll try to answer them. You may also call the National Cancer Institute hot line at 1-800-4-CANCER.