

A LINE ON LIFE

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Treatable Prostate Cancer *

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Most of us know that breast cancer is the most frequent cancer among women and is second in causing deaths. Currently, one out of eight American women is expected to get breast cancer. On the other hand, fewer people know that **prostate cancer** holds a similar standing with men. Like breast cancer, prostate cancer is the second in causing deaths and the most frequently occurring cancer among American men. (Lung cancer is the number one killer in both sexes. Because the lungs have many more blood vessels, this allows the cancer to spread more quickly.) If both cancers are second in causing deaths, why have we heard so little about prostate cancer? What can be done if you have it?

The prostate is a walnut-sized muscular gland at the base of the bladder. Not only does it provide a portion of the semen, but it also governs the flow of urine from the bladder and semen during ejaculation. Typically, prostate cancer was found more frequently among men over 65. However, in the last two decades, more men in their 40s and 50s are afflicted with the disease. Although we don't know why, prostate cancer is 2-3 times more likely to occur with blacks than whites, even if we account for various socioeconomic factors.

Usually the prostate tumor is slower in developing than breast cancer. Sometimes it develops so slowly that the man dies of something else, and the prostate cancer is only discovered in autopsy. In men under 60, the tumor can develop and spread more quickly. This is why the American Cancer society recommends that *men over 50 get a rectal exam annually*.

Like any other disorder, cancers can be treated best, if they are discovered at the earliest possible stage. Prostate tumors can be detected early by doing a routine **digital rectal exam** – inserting a gloved finger in the rectum to feel for growths on the prostate. If a malignancy is discovered while it is restricted to the prostate, the cure rate is essentially 100%.

"Refusal to have exams prevents many cures."

Unfortunately, women are more likely to get their breasts routinely checked than men are to have their prostates examined. About 85% of men will not get a rectal exam, unless they have a specific problem. Usually this involves difficulties in urinating. At this point, about 70% of the cancers have spread beyond the prostate. This makes them more difficult – if not impossible – to cure.

For some men, viewing the rectal exam as unpleasant leads to avoiding this procedure. In addition to the rectal exam, there is also a blood test – **PSA, Prostatic Specific Antigen**

test – which detects a blood protein. Often the level of this protein rises when you get a cancer, and it continues to increase as the tumor grows. However, this test is not yet very reliable in detecting cancer. For example, the test missed 30% of the tumors found with the digital rectal exam.

Until recently, as a cure, a **prostatectomy** – the surgical removal of the prostate gland – involved cutting nerves that make the man physiologically **impotent** – unable to get an erection. However, newer variations of this surgery now avoid cutting these nerves, so the patient can continue a normal sex life. However, after any prostatectomy, the man will experience retrograde ejaculation – the ejaculation flows backward into the bladder. (Later the semen is passed out of the body during urination.) Even though the man can have normal sexual activity and pleasure, he does not ejaculate externally. Therefore, he is **sterile** – he cannot have any children.

Just as breast cancers in women are related to estrogen production, prostate cancers seem to be influenced by the androgen called **testosterone**. It seems like the testosterone fuels the growth of malignant cells. Previously, the growth of malignant cells was retarded by an **orchiectomy** – castration, surgical removal of the testes. Currently, there are drugs that reduce the levels of testosterone without surgery. However, either treatment causes side effects of impotency and/or greatly reduced sex drive.

As threatening as these side effects seem, at least the men will still be able to experience the other joys of living. Likewise – even if the necessary rectal exam seems unpleasant – is avoiding this brief exam worth risking death by cancer?

* Adapted from Natalie Angier's "Long Ignored, Prostate Cancer Gets Spotlight as Major Threat", *The New York Times*, November 13, 1991, Reprinted in *Themes of the Times*, Prentice Hall, 1993, page 2.