

# The Practical Prostate Cancer Guide

Stephen Holland

Does prostate cancer worry you? It should.



Sebastian Munster 1572

Monsters of the Sea and Land: *De regnis septentrion. Monstra marina & terrestria*.....

<http://www.betzmaps.com/M-59.html>

# The Practical Prostate Cancer Guide

## Introduction

Stephen Holland    Email: [sholland@softwaves.net](mailto:sholland@softwaves.net)

Revised: February 8, 2004

**Ignorance is dangerous.** I am writing this because I have cancer of the prostate (CaP) at age 61, and have discovered that I, like most other men, have been ignorant about the prostate.

I have also discovered that there has been far too much reliance on the digital rectal exam (finger exam), which detects cancer usually too late for a cure! The DRE is dangerous if we ignore the PSA tests.

The goal of this presentation is to save lives by encouraging patients to know more, and doctors to take even low PSA tests seriously.

When dealing with prostate cancer,  
ignorance is not bliss, it's life-threatening.

Men are notorious for not going to doctors, or admitting they are sick.

*--- As a result, many men die early of medical problems  
which could have been treated earlier.*

I have discovered that there is another common pattern – doctors are trained to rely too much on the old standby of the digital rectal exam (finger test) and tend to say, “Don't worry” to their male patients.

*--- As a result, many men die early of prostate cancer  
which could have been treated earlier.*

# Contents

Introduction	2
Listen to alarm warnings	4
Your age is very important	5
Facts	6
What is the prostate?	7
Enlargement of the prostate	8
Blood Test 1 = "PSA" -- is there a problem?	9
Blood Test 2 = "% Free PSA" -- Is it Cancer?	10
How big is the cancer? - "Stages T1a, etc."	11
Digital Rectal Exam – DRE	12
Biopsy and Ultrasound	13
Possible Serious Side Effect of a Biopsy	14
How dangerous is the cancer? - "Gleason Grade"	15
Gleason 1 = Early cancer	16
Gleason 3 = Borderline aggressive	17
Gleason 5 = Terrorists	18
Prostatectomy surgery	19
Worry # 1 – Has it spread?	20
Worry # 2 – Sex after treatment?	21
Worry # 3 – Incontinence	22
Radiation treatments	23
Hormones, Herbs, and Freezing	24
Prevention is a good thing, if it works	25
Summary	26
The author's story	27
References	28

# Listen to Alarm Warnings

Subtitle: Don't trust the finger exam



2 = something wrong

## Treat a Moderate PSA ( 2 + )

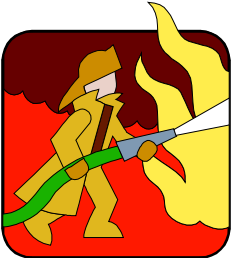
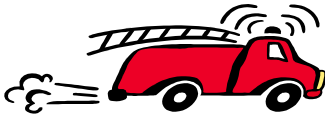
*as a smoke Alarm indicating  
"something is wrong with the prostate"*

Something is wrong with the prostate tissue so PSA molecules are leaking into the blood. It could be a false alarm, due to inflammation or other causes, but take it seriously until proven otherwise. My recommendations:

1. Ask doctor for a blood test for " % Free PSA"
2. If you have a "Free PSA" less than 30%, then...
3. Get the best urologist you can find
4. Get a biopsy

## Treat a "Digital Rectal Exam" (finger test) discovering a lump...

*as a Siren of a Fire Truck  
when your house is on fire*



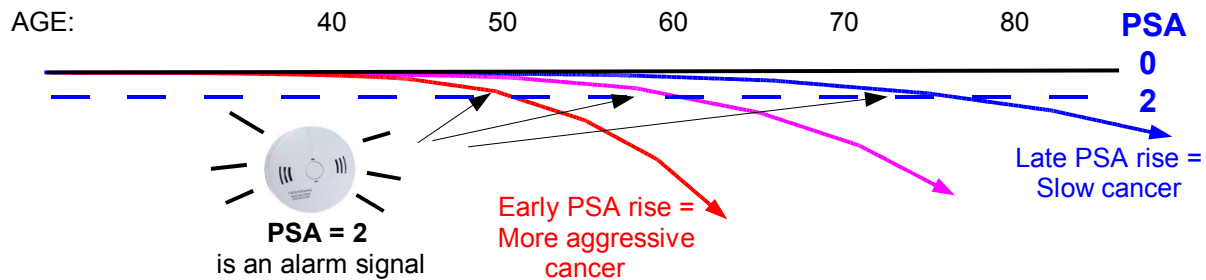
You are in serious trouble. The cancer is already so big it can be felt as a lump from the outside. There is a strong chance it has already spread through your body, so that surgery won't help.

Your urologist now has to try other treatments to stop or slow down the cancer, such as radiation and powerful hormone treatments.

# Your age is very important

## Prostate cancers that start early tend to be more aggressive

These curves suggest life expectancy with different prostate cancers  
(they are my interpretation, not official curves)



The common belief that “prostate cancers grow slowly” mainly refers to older men. Prostate cancers that start in the 50's and 60's are less common but more aggressive, and even fairly low PSA levels should be taken seriously.

The general advice from doctors is that if you have less than 10 years life expectancy, then you shouldn't have prostate surgery because the trauma of surgery is worse than the cancer danger. However, **if you think you have more than 10 years to live, then take PSA very seriously.** It's your life, and your sex life, at stake.

**If you are under 70 and have PSA levels in the 2 range, then you should consider it an alarm bell, and see a urologist.**

**Better to over-react and learn it is a false alarm, then under-react and be the 2 / 3 who don't catch cancer in time to be curable..**

# Some Facts?

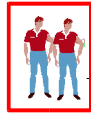
Different scientific sites give different information, but these are examples.

“Prostate cancer is the most commonly diagnosed form of cancer, other than skin cancer, among men in the United States and is second only to lung cancer as a cause of cancer-related death among men. The American Cancer Society estimates that 198,100 new cases of prostate cancer will be diagnosed and that 31,500 men will die of the disease in 2001 “  
-- Center for Disease Control CDC

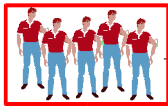


## Prostate cancer is strongly hereditary

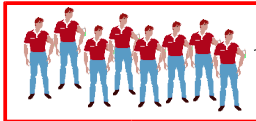
On the average, men of 50 years of age have a 1 in 8 chance of getting prostate cancer (12.5%).



If **one** close relative has it, there is a 1 in 4 chance (25%)

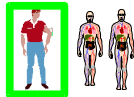


If **two** close relatives have it, there is a 5x increase (63%)



If **three** close relatives have it, there is a 97% chance.

**Many men without older brothers may be in the high risk rate without realizing it**

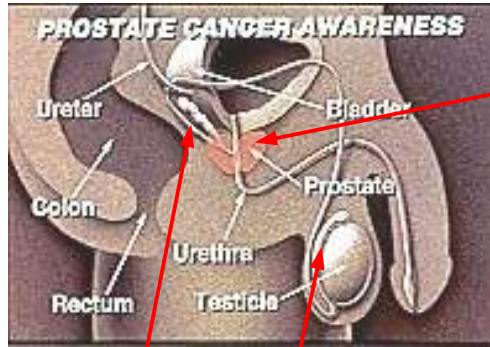


Prostate cancer has a 95% cure rate when detected at an early stage, but **only 1/3 of cases are diagnosed early enough to be cured** (mainly because of too much reliance on the DRE)

statistics from the website of --- <http://www.crpc.info>

**The Prostate Centre**  
100 - 1900 Richmond Road  
Victoria, B.C., Canada V8R 4R2

# What is the Prostate?



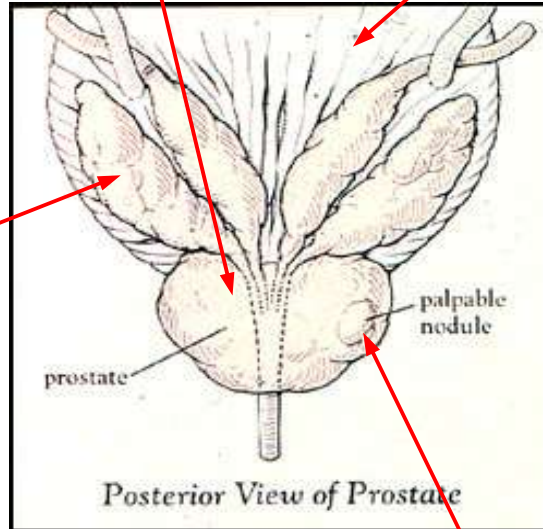
**The Prostate** produces seminal fluid, which the sperm swim in

**Bladder**

**Testicles** produce sperm

**Seminal Vesicles** contribute to seminal fluid

**Semen** produced during ejaculation is a collection of seminal fluid and sperm



**Prostate Cancer**

Pictures from **Marin Urology**

[http://www.marinurology.com/articles/cap/cap\\_intro.htm](http://www.marinurology.com/articles/cap/cap_intro.htm)

# Enlargement of the prostate

The Prostate enlarges because...

...Normally with age ( **Benign Prostate Hyperplasia** )  
...Inflammation ( **Prostatitis** )  
...Cancer of the Prostate ( **CaP** )



“Normal Size” = Walnut



“Twice Normal size” = Small Orange



“Grapefruit size”

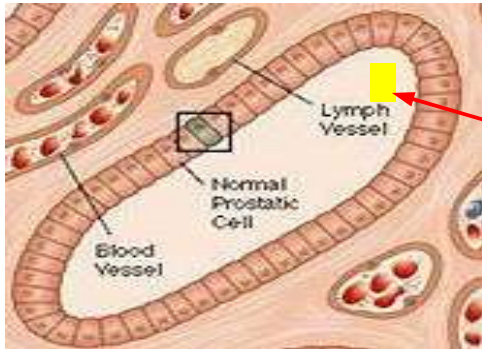
**Larger prostates create problems:**

- Difficulty in urination
- More difficulty in saving erection nerve during surgery

For Prostatitis problems, see the website  
<http://www.prostatitis.org>

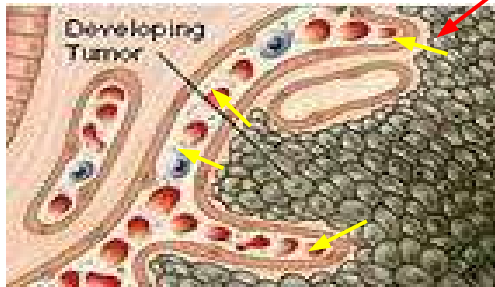
# Blood Test 1 = “PSA”

## Is there a problem with the prostate?



The prostate cells produce a “Prostate Specific Antigen” (PSA) protein that keeps semen liquified in the tubules

If the prostate is disturbed by inflammation or cancer, the PSA protein tends to leak into the blood, and can be measured.



The amount of PSA often indicates the size of cancer. “The PSA level in the blood can vary by about 20% from day to day. Nevertheless, the data are clear that a single abnormal PSA value puts one in the higher [ risk] group for prostate cancer,” although “*the test can be falsely elevated by trauma, infections, and intercourse.*” \*

**Don't expect the doctor to call you when you need a PSA test.**

**Write down your PSA and keep your own records**

### Suggestions

- PSA 2** *Something may be wrong.* See a urologist. Test for “Free PSA” Test PSA in 6 months
- 2.5** Have a biopsy to find out what is wrong, and start treatment as needed. Do something.
- 4–10** “PSA range of 4 to 10 characterizes most curable cancers” \* Probably surgery. Hopefully it hasn't spread
- 10 +** Likely spreading and beyond surgery. Body radiation and hormone treatments


pictures from Marin Urology, and modified with yellow items.


\* **Marin Urology**

<http://www.marinurology.com/articles/cap/learning/psa.htm>

## Blood Test 2 = “% Free PSA” Is the problem cancer?

If the prostate is disturbed by inflammation or cancer, the PSA protein tends to leak into the blood, and can be measured. However, scientists have discovered that **PSA can come in several forms**, which can give clues to Cancer of the Prostate CaP

 ← 1) The basic “**Free PSA**” molecules are small and leak into the blood easily with any disturbance, such as normal enlargement with age.

 ← 2) **A malignant tumor disturbs the prostate tissue more than non-cancer causes, allowing leakage of larger molecules**, such as **Combined PSA** where the **PSA is combined with a carrier protein**.

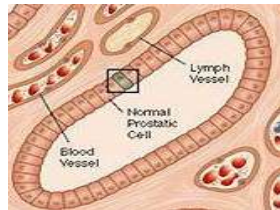
**Therefore, a LOW % of Free PSA indicates serious disturbance of prostate tissue, such as possible cancer.**

**Example of LOW % of Free PSA**

**Example of HIGH % of Free PSA**

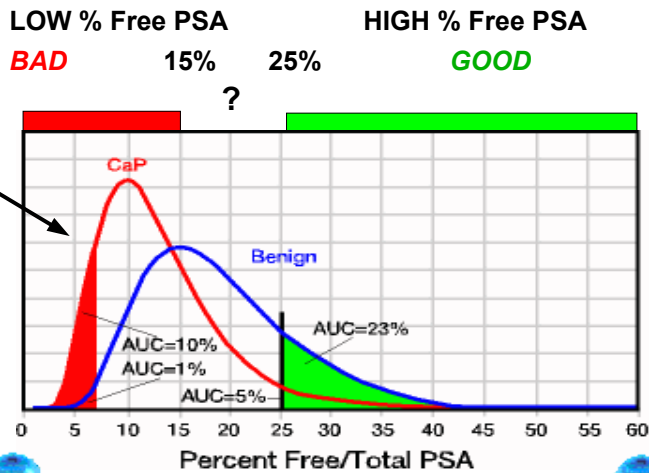
Only 1 / 4 ( **25%** ) of PSA molecules are free type  
= probably **CANCER**

3 / 4 ( **75%** ) of PSA molecules are free type  
= probably **NOT** cancer



**Most patients with prostate cancer have a free PSA less than 15%.\***

Patients with free PSA over 25% usually have benign prostate hyperplasia, or normal enlargement of prostate with age.



**Ask your doctor for a second blood test for “% Free PSA” if the PSA is 2 or higher**

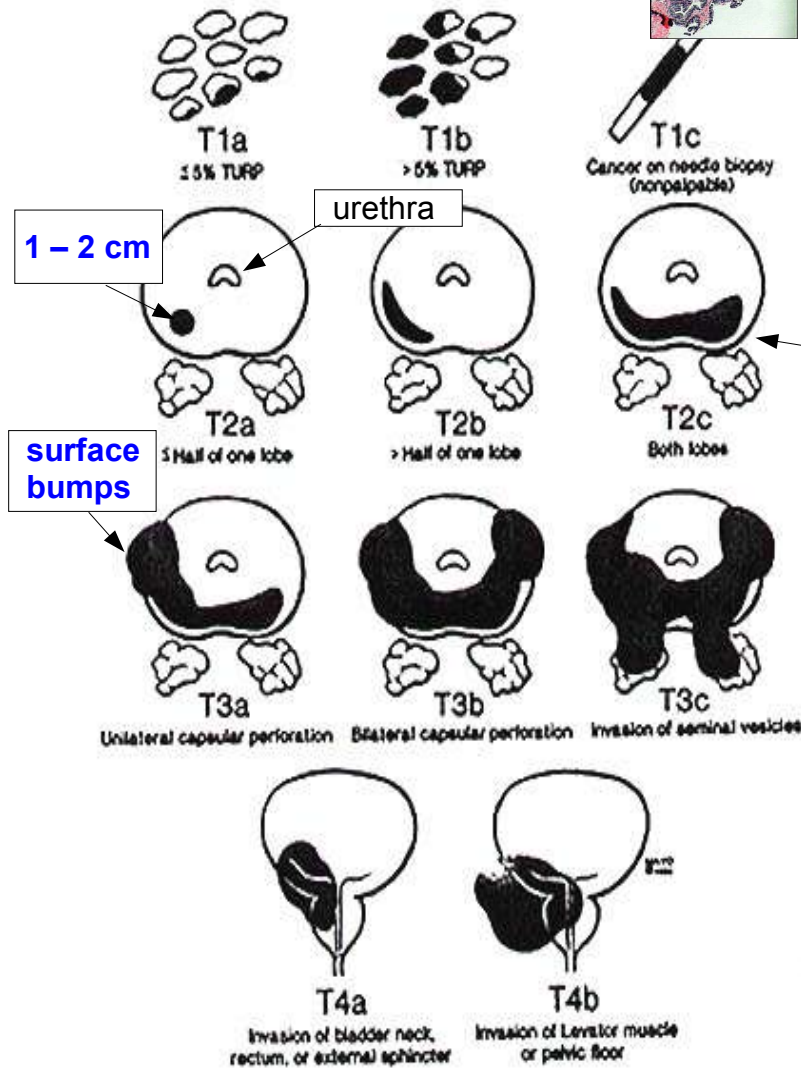
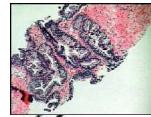
Note: The standard term is the “Free PSA” test, which confuses men into thinking it is just a *Free* “PSA” test. I use the phrase “% **Free PSA**” test.

\* <http://www.marinurolgy.com/articles/cap/learning/psa.htm>

# How Big is the Cancer?

Detectable by...?

## "Stages"



PSA *	Finger exam?
1 – 3 ?	Fails to detect early cancer
4 – 10 ?	May fail Works only if cancer is large enough, and near bottom surface.
Generally higher numbers	Detects ok, but too late

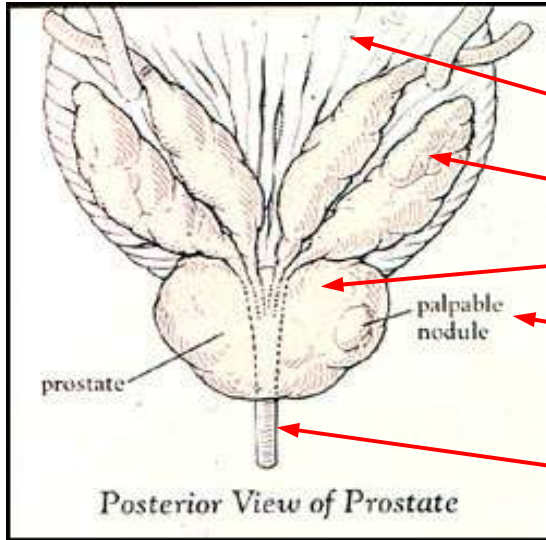
Pictures from **Marin Urology**

<http://www.marinurology.com/articles/cap/learning/gleason.htm>

# Digital Rectal Exam – DRE

Before the PSA blood test was developed, the finger exam was the best test. **However it usually does not detect a cancer until it is advanced and feeling lumpy on the surface.**

**The DRE can be dangerous because it fools doctors into thinking that nothing is wrong.**



## Underside of prostate area

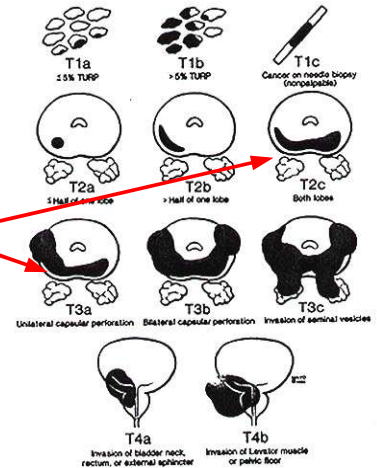
Bladder

Seminal Vesicles

Prostate

**Cancer big enough to be felt...if at the right locations**

Urethra carrying urine



## The Center for Disease Control also distrusts the DRE

“**Digital rectal examination (DRE)** has been used for years as a screening test, but its ability to detect prostate cancer is limited. Tumors often form in areas of the prostate that cannot be reached by a DRE. “

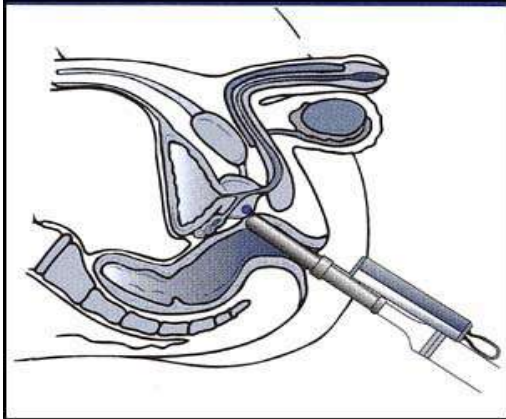
(\*<http://www.cdc.gov/cancer/prostate/prospdf/proaag01.pdf>)

Pictures from **Marin Urology**

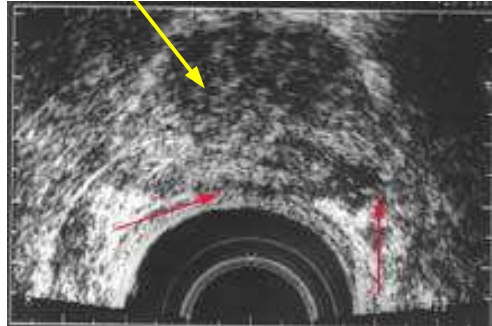
[http://www.marinurology.com/articles/cap/cap\\_intro.htm](http://www.marinurology.com/articles/cap/cap_intro.htm)

# Biopsy and Ultrasound

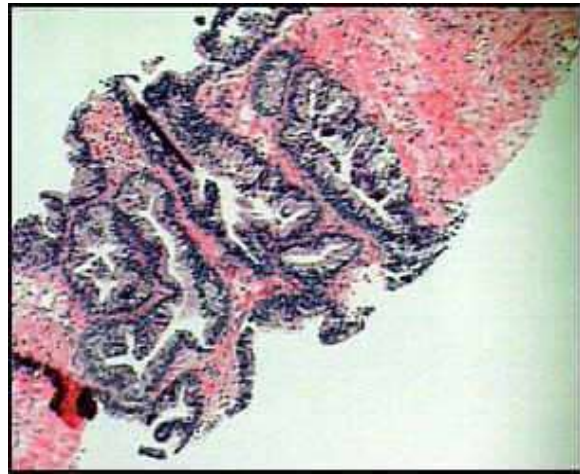
Ultrasound and biopsy are usually done at the same time, under a local anesthetic. It is the only way to really know what is happening. A single session is about **85% accurate in finding prostate cancer \***



**Ultrasound** gives a good picture of shape but does not show cancer well



**Biopsy needles** (about 10) are shot into prostate, then contents are examined by a pathologist under microscope.



Biopsies are temporarily uncomfortable with a local anesthetic, but very messy. A shower would be desirable afterwards.

Semen may contain blood for some months following a biopsy due to tissue disruption.

See the next page about a possible serious side effect – E. coli bacteria contamination

NOTE: Any significant **dental work**, from cleaning to root canal work, **can spread bacteria into your blood.** Bacteria can multiply in a bag of blood. A toothache may cancel your operation. **If you need any dental work before an operation, talk to your doctor!** A simple antibiotic may resolve the dental problem until later.

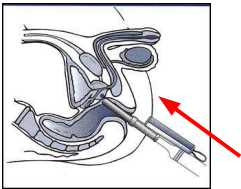
Pictures from **Marin Urology**

[http://www.marinurology.com/articles/cap/cap\\_intro.htm](http://www.marinurology.com/articles/cap/cap_intro.htm)

## Possible Serious Side Effect of a Biopsy

At least one possible biopsy side effect is serious enough to **strongly encourage more use of “% Free PSA” blood tests** as a non-invasive initial screening

(A high % of Free PSA suggests the problem is **not** cancer) and may postpone the need for a biopsy.



**Bacteria may spread into the body from the bowel** as the needle goes in. The internal bowel cannot always be made completely bacteria-free, thus there is a significant risk of E. coli spreading into the prostate and blood. The term is “**septic**,” meaning full of bacteria (as in septic tank). The result is a form of “blood poisoning.”

This is **highly dangerous**, and can be deadly in a matter of hours.

Symptoms include – **Fever, sweating, and malaise** (not feeling well)

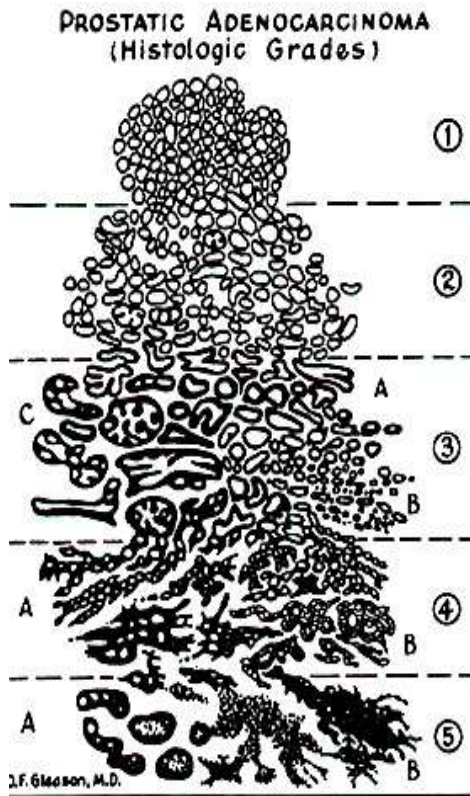
**Ask your doctor about symptoms, what to do**, etc. (Nurses also usually have lots of experience and good advice.)

# How Dangerous is the Cancer?

## “Gleason Grade”

Dr. Gleason in 1974 invented a system for categorizing aggressiveness of prostate cancer cells. Pathologists look at tissue from a biopsy needle and give two numbers, based on how cancer cells deviate from normal prostate tissue.

To get a Gleason Grade, you add two numbers  
 Gleason number for **average** cancer cells seen    3  
 Gleason number for **worst** cancer cells seen    4  
**Gleason Grade (3 + 4) = 7**

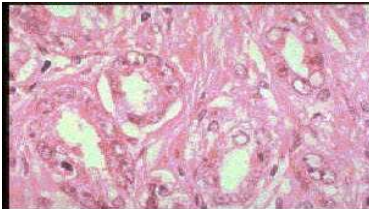


① # 1 = cancerous but low aggressiveness



② # 2 = more distorted

③ # 3 = borderline aggressive



④ # 4 = nasty types, more aggressive, likely spreading through body into lymph nodes and bone marrow

⑤ # 5 = psychotic terrorists

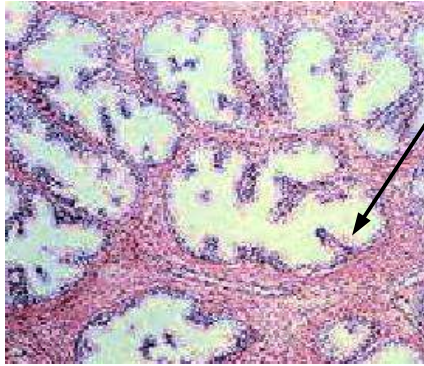
Figure 5.1: Appearance of cancer cells, ranked according to the Gleason grade.

Gleason 1+1 tumors grow slowly and rarely spread. Gleason 4+5 tumors are often widely metastatic at the time of diagnosis. \*

Pictures from **Marin Urology**

\* [http://www.marinurology.com/articles/cap/cap\\_intro.htm](http://www.marinurology.com/articles/cap/cap_intro.htm)

# How Dangerous is the Cancer?



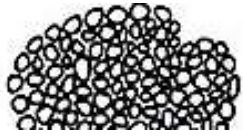
**Normal** prostate tissue. White cavities are cross sections of long tubules ("lumina") where semen fluid is produced

## Gleason # 1

Cancer cells change from normal cells, and start dividing



①



Cancer is spreading as cells divide

Tubules pushed to one side

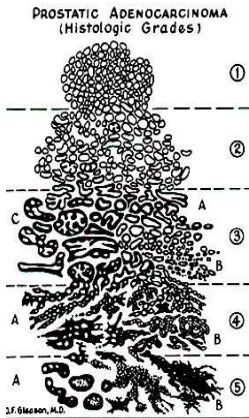
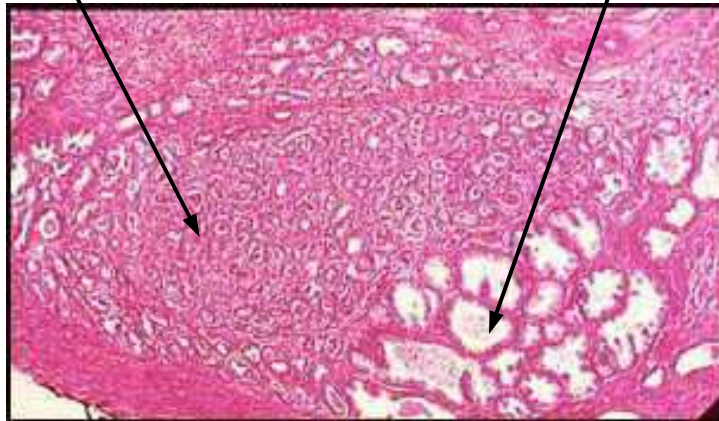


Figure 5.1: Appearance of cancer cells, ranked according to the Gleason grade.

Pictures from **Marin Urology**

[http://www.marinurology.com/articles/cap/cap\\_intro.htm](http://www.marinurology.com/articles/cap/cap_intro.htm)

# How Dangerous is the Cancer?



**Gleason # 3**

Cancer cells are very different from normal cells

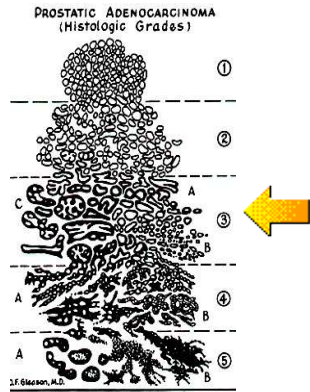
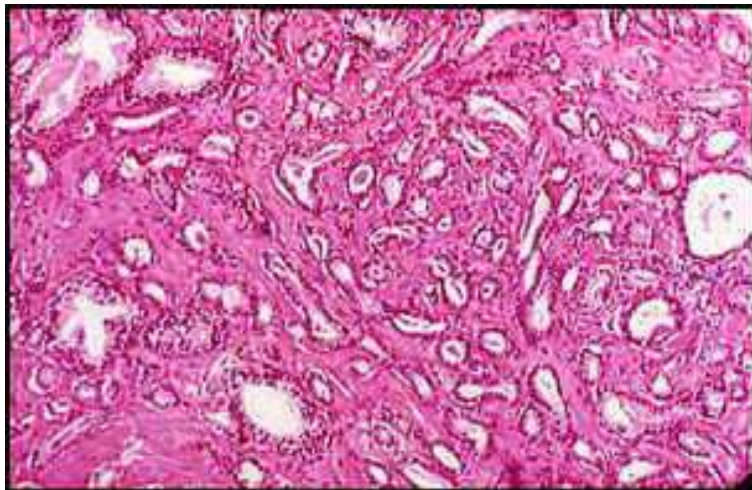
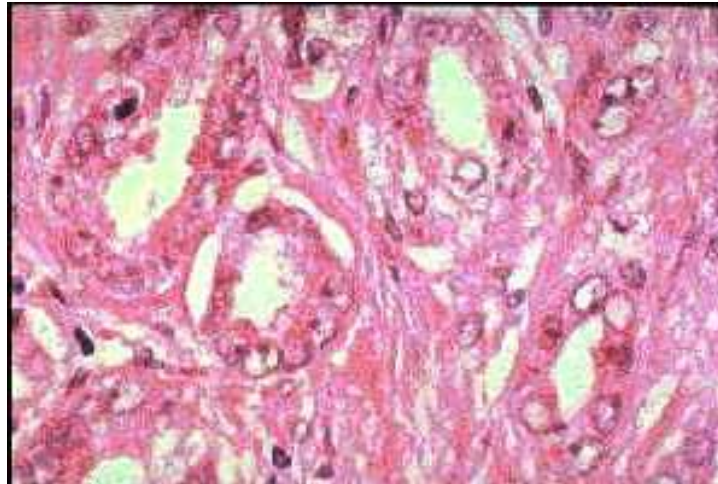


Figure 5.1: Appearance of cancer cells, ranked according to the Gleason grade.

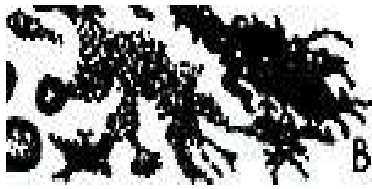


Cancer is invading much of prostate structure

Pictures from **Marin Urology**

[http://www.marinurology.com/articles/cap/cap\\_intro.htm](http://www.marinurology.com/articles/cap/cap_intro.htm)

# How Dangerous is the Cancer?



⑤

## Gleason # 5

Cancer cells are aggressively taking over prostate, and probably spreading to lymph nodes and bone marrow

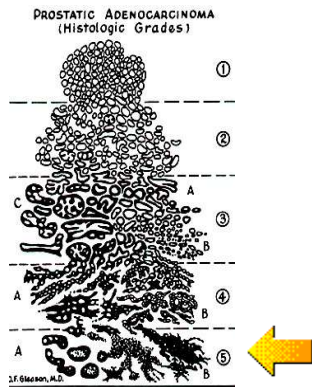
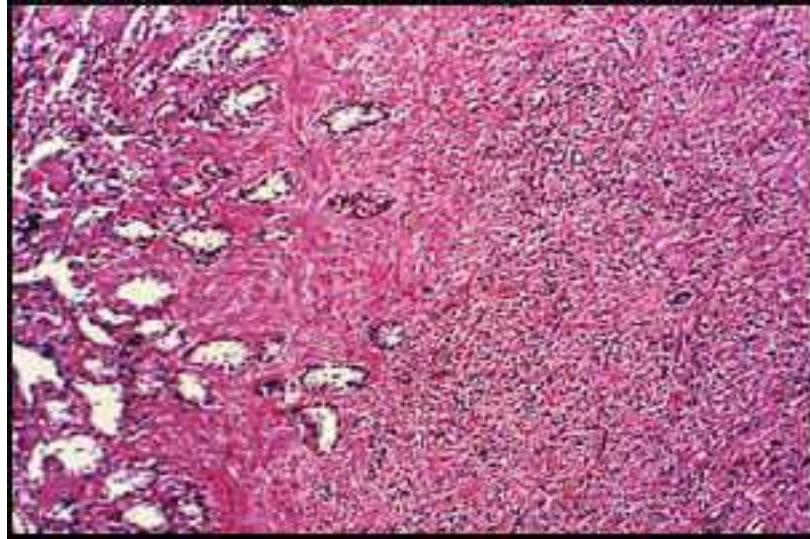


Figure 5.1: Appearance of cancer cells, ranked according to the Gleason grade.



Pictures from **Marin Urology**

[http://www.marinurology.com/articles/cap/cap\\_intro.htm](http://www.marinurology.com/articles/cap/cap_intro.htm)

# Prostatectomy Surgery

1. The patient is put under a general anesthetic, a catheter is put in, and an incision is made, usually below the navel
2. The surgeon often removes the **lymph nodes**, which are then examined by a pathologist with a microscope while the patient sleeps peacefully.
3. **If the pathologist sees prostate cancer cells in the lymph nodes, then the cancer has already metastasized, probably spreading into the bones. Usually the surgeon then stops the operation, and the patient will have to undergo radiation, hormone therapy, etc.**
4. If the lymph nodes do not show spreading, then the operation continues.

In a "radical prostatectomy," the prostate, seminal vesicles, and section of the urethra are removed. The bladder is stretched to fill the gap, and sewn to the sphincter muscle.



Sphincter muscle  
closes urethra to control urination

After surgery, a catheter tube is in place for a week or two, with a small day urine bag strapped the leg, and a larger night time bag. When the catheter is removed, the patient wears diapers, pads, etc. as needed for awhile.

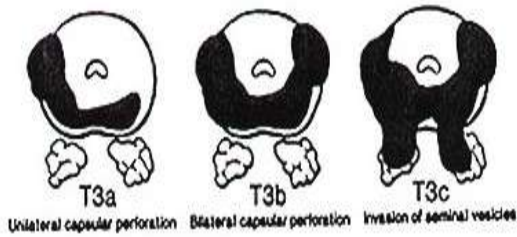
## "Nerve sparing surgery"

Whenever possible, the urologist surgeon tries to save the nerve which controls the erection of the penis. However, the nerve is almost invisible, and is difficult to spare if the prostate is enlarged, or if the cancer is near the nerve.

The average is often about "50/50" chance of sparing it, but this will depend heavily on conditions, and the experience of the urologist.

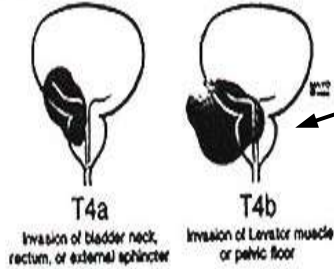
Pictures modified. Ask your urologist for his explanation.

# Worry # 1 – Has it spread?



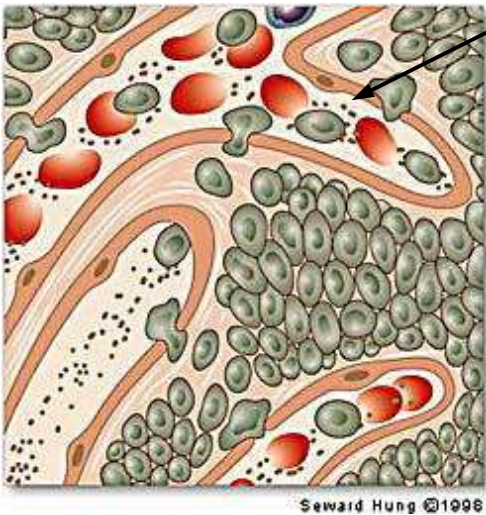
A major problem with postponing surgery is spreading cancer !

Cancer can spread in two ways:



**1. Getting Bigger** – The prostate cancer can just keep getting bigger, invading the seminal vesicles, bladder, rectum, etc.

**2. Metastasis** – Single cancer cells can spread to other parts of the body and create new tumors.



Prostate cancer tends to spread to the **lymph nodes** and **bone marrow**.

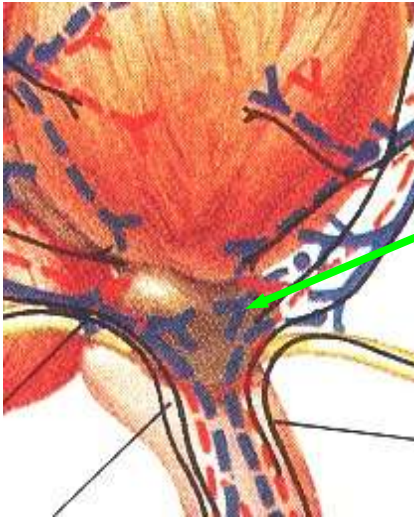
If prostate cancer spreads to the bones, the cancer cells in the new tumor are prostate cancer cells. The disease is “metastatic prostate cancer;” it is not bone cancer. Therefore, **a rise in PSA levels after surgery indicates prostate cancer cells are multiplying somewhere else in the body**

**Treatment** usually consists of **Full body radiation**, every day for 6-7 weeks, and

**Hormone treatment**, which blocks testosterone (side effects: loss of sex drive, enlarged breasts, hot flashes)

Pictures from **Marin Urology**  
[http://www.marinurology.com/articles/cap/cap\\_intro.htm](http://www.marinurology.com/articles/cap/cap_intro.htm)

## Worry # 2 – Sex after treatment?



### The Nerve

The nerves that control erection of the penis run along the prostate and urethra (blue at left). This allows the urethra to be shut off during sex.

Surgeons try to save these nerves, but this is difficult if the cancer is near the nerves, and if the prostate is enlarged too much.

**Early surgery, when a cancer and prostate are smaller, promotes a better chance of saving the nerve. Radiation, freezing, and hormones can also cause significant sexual problems.**

**There may be more sexual problems due to hormone treatments, which affect libido, than due to nerve damage.**

**Sex is almost always possible.**

- 1. If the nerves still work**, then there is a good chance of normal erections after surgery, perhaps with viagra, etc.
- 2. If the erectile nerves are lost**, then other means can be used to produce an erection. An internal pump system is popular and effective.
- 3. The nerves do *not* affect skin nerves and pleasure sensation**, only erection.
- 4. Without a prostate, a man may still have a kind of orgasm, but nothing comes out.**

## Worry # 3 – Incontinence



**Incontinence** is the inability to control urination.

After the redesign of the bladder during surgery, a patient wears a bag for a couple of weeks, then gradually changes to diapers, and eventually pads, etc.

“90-95% of males are completely continent (pad free) 6 months postoperatively after surgery performed by an experienced surgeon.” \*

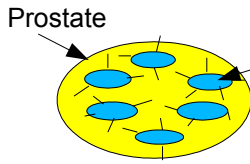


Incontinence after surgery is a bother... but so is dying from cancer if surgery is not chosen.

\* [http://www.medicalinfo.com/prostate\\_cancer.htm](http://www.medicalinfo.com/prostate_cancer.htm)

# Radiation Treatments

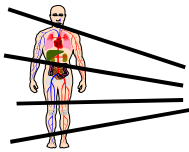
## Brachytherapy



Little radioactive “seeds”, the size of grains of rice, are inserted into the prostate. They last about a year, and kill cancer cells locally.

**pros:** “This is a one-time treatment. It can control disease in good risk patients.” \*

**cons:** **Only useful on small cancers.** More aggressive cancer cells may spread while waiting for radiation to work. There is a risk of bladder outlet obstruction, which causes difficulty urinating, in a small percentage of men.



## Whole Body Radiation

The whole body is zapped by x-rays, 6-8 weeks, every day. Usually done if cancer cells are detected in lymph nodes or bones.

**pros:** Cancer cells are more sensitive to radiation than normal cells.

**cons:** Usually used with hormone treatment, with its side effects.

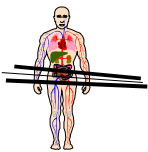
## Prostate only Radiation

Only the prostate is radiated, without surgery. Radiation then becomes the primary treatment.

**pros:** Fewer body side effects.

**cons:** Usually used with hormone treatment, with its side effects.

“Disadvantages of radiation as the primary treatment for local disease include the following: There is not complete removal of prostate. PSA does not become undetectable, increasing patient anxiety. If surgery is required later, it is more difficult to do after radiation therapy. GI (bowel) toxicity can occur.” \*



\* [http://www.medicalinfo.com/prostate\\_cancer.htm](http://www.medicalinfo.com/prostate_cancer.htm)

# Hormones, Herbs, and Freezing

There are other treatments, sometimes combined with surgery. One concern about doing these treatments *before* surgery is that some cancer cells could be spreading while you are waiting for alternative treatments to work. Also, just lowering PSA does not automatically mean decreasing cancer.

## Official Treatments

### Chryotherapy

Freezing with liquid nitrogen. May work on small, early cancers.

**pros:** Aimed to focus treatment on just the prostate area.

**cons:** Freezing usually damages the erectile nerve, producing impotence.

### Hormone Therapy – the standard medical treatment

“Prostate cancer, in most cases, requires testosterone to grow. Endocrine therapy of prostate cancer is still the standard and first choice for patients with advanced and progressive disease.” (Includes *Eulexin, Casodex, Lupron, Proscar, Zoladex*). This hormonal treatment is often combined with surgery and radiation.

**pros: Slows cancer down.** This is the main treatment when cancer has spread.

**cons: Significant side effects.** According to medical websites, “80% of men have some cancer cells which resist treatment, and therefore have cancer return in a few years. Men with bone cancer have returned cancer usually in 5 years, while cancer in lymph nodes takes usually 8 years to reappear.”

Because the hormone blocks testosterone, “it frequently results in hot flashes which can be very annoying. Libido disappears. Muscle mass declines and fat increases. Breast swelling can be bothersome. Loss of bone density is significant...”

If hormone therapy is done before surgery, then “nerve sparing radical prostatectomy becomes technically impossible after hormone therapy.”

## Un-Official Treatments (some examples)

### Herbs – PC-SPES – Do-it-yourself hormone treatment

“PC-SPES contains a mixture of chinese herbs and saw palmetto. The mixture appears to have novel **estrogen like properties**.” Saw palmetto is apparently a strong estrogen imitator.

**pros: Lowers PSA.** “61 patients demonstrated PSA decreases in all of the patients”

**cons: Acts like estrogen.** “PC-SPES has not, however, been shown to improve length or quality of life. It may be toxic, in that 92% of [men] reported breast tissue development [bigger breasts] as would be expected from estrogens. There were also patients who developed leg cramps, nausea and vomiting, and deep vein thromboses. These are the toxicities one would expect of an estrogen containing drug.”

(above) quotes and information from Marin Urology website

<http://www.marinurology.com/articles/cap/learning/hormonal.htm>

(below) Information below from American Cancer Society ([cancer.org](http://cancer.org))

### Shark Cartilage

Occasional dramatic claims of success at shrinking tumors. It apparently slows blood vessel growth, so cancers starve and shrink. Interestingly, many so-called “miracle cancer cures” are other drugs that do what shark cartilage *might* do, but work more dependably and are patentable.

Apparently there is some laboratory evidence that it might really cut cancer blood vessel growth in certain situations, but does not do it dependably for all patients, and may not work if taken by mouth. See the American Cancer Society ([cancer.org](http://cancer.org)) and do a search for “shark”.

**pros:** Might work for some people. Hardly any risk or side effects compared to powerful hormones.

**cons:** Some side effects. Very experimental. Not taken seriously by many doctors.

# Prevention is a good thing, if it works

While prevention of cancer is most desirable, there is no sure-fire method. Basically, you do what you can, but continue to monitor PSA levels. If the healthy methods work, great.

If they don't work, you don't want to be ignorant of cancer which might be growing. A danger is that they may lower PSA levels without slowing the cancer growth much.

## Hereditary

Prostate cancer seems to have a strong genetic component. If you have male relatives who have had prostate cancer, there is a much stronger likelihood of you getting cancer -- both early and aggressive.

Preventive measures may delay cancer, or make it less aggressive, when there is a genetic tendency, but this is hard to determine. I lead a fairly healthy life style, with all the following, but got cancer anyway -- much earlier than my father but only a few years later than my brother.

## Some current ideas:

### Tomatoes – lycopene

There is evidence that lycopene in tomatoes will help prevent or possibly slow down prostate cancer. Tomato paste seems to be the most effective. Pizza or spaghetti anyone? Might help and tastes good.

### Carrots – beta carotene

Carrots may help with prostate and PSA problems.

### Selenium and Vitamin E

Selenium and Vitamin E seem to help prevent prostate cancer, when compared with control groups.

**Individual humans have great variations in internal chemistry**, as shown by the great variety of side effects that different people show for the same drug. Something may truly be a miracle cure for one person and be useless for another.

# Summary

1. **Ask your relatives** if any have had prostate cancer.
2. **Maximize prevention** with healthy foods. There are indications that tomatoes (especially tomatoe paste), Vitamin E, and selenium, may lesson prostate cancer risk.
3. **Don't trust the finger exam** (Digital Rectal Exam DRE). It is worse than useless because it fools doctors into thinking that there is no cancer.
4. **Keep written records of PSA tests**. Insist on PSA tests every year from age 50, and ask your doctor what the numbers are. Make a chart to show the trend. Keep photocopies of major blood tests.
5. **Treat PSA = 2 as a smoke alarm screaming**. Something is wrong with the prostate. Test for "% Free PSA" and see a urologist. Test PSA every 6 months or sooner --- a lot can happen in 12 months.
6. **Ask for a blood test for "% Free PSA"** if the PSA is 2 or higher.

## **If the "Free PSA" ratio is less than 25%, you may have cancer.**

7. **Talk to other men**, who often have stories to tell, and who are often hungry to learn more. Ask about their experiences and recommendations.
8. **Find the best urologist you can**. The medical websites often mention how important experience is for successful surgery and good advice. Urologists vary as much as any people. Ask other men about their urologists.
9. **Get a biopsy** if your PSA is approaching 3, or if "% Free PSA" is less than about 30%. Find out what is happening inside!

## **IF THE NEWS IS BAD....**

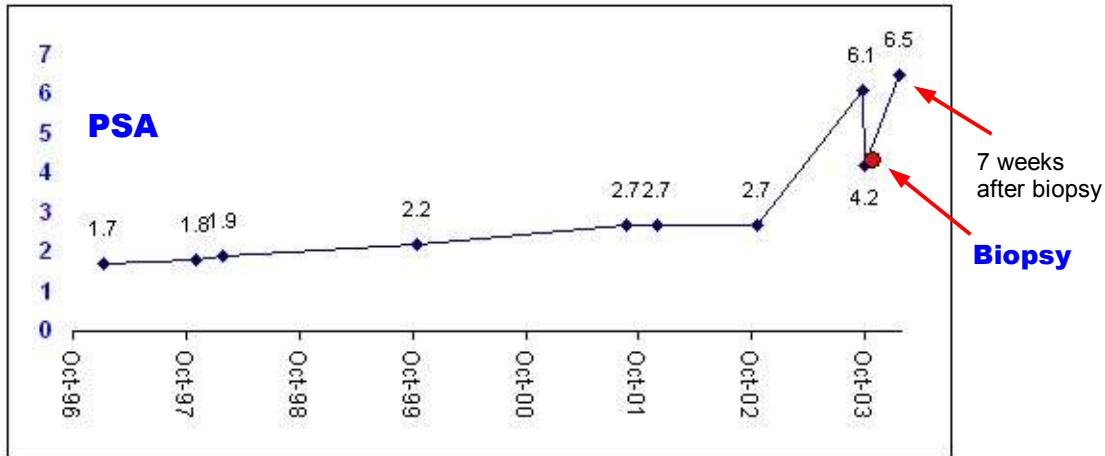
10. **Try alternatives to surgery--- if you catch the cancer early enough** (T1 stage). But be careful that cancer cells are not spreading while you are experimenting or waiting. Monitor closely with PSA and biopsies.
11. **The only sure "cure" for prostate cancer seems to be early surgery before the prostate spreads**. When the prostate is smaller there is a much better chance of saving the erectile nerve. A large prostate can causes urination and other problems. Early prostatectomy, before cancer spreads, should eliminate future needs for radiation and hormone treatment.
12. **Don't worry about sexual problems after treatment**. They are usually fixable. (Being dead -- because you postponed treatment -- tends to lower your libido rather drastically.)

## The Author's Story

### Don't trust the "finger exam."

My brother had cancer and a prostatectomy with a PSA of only 3.9 at age 57. My father had prostate cancer when he was in his 80s.

After a year holding at 2.7, my PSA shot up from 2.7 to 6.1, at age 61. Two weeks later it measured 4.2 when I requested a second test.

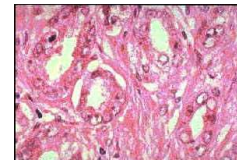


My doctor did a DRE and said the prostate felt "normal." He sent me to a prostate specialist urologist who also did a DRE and also told me it **felt "normal."**

However the urologist did a biopsy because of the higher PSA.

**The biopsy indicated the prostate was far from normal.**

- My prostate was twice normal size
- There was a cancer roughly 1-2 cm in size ( T2a )
- The cancer cells were borderline aggressive ( Gleason 3 + 3 )
- The urologist said I had a 1 in 5 chance it has spread



**So much for the finger exam!**

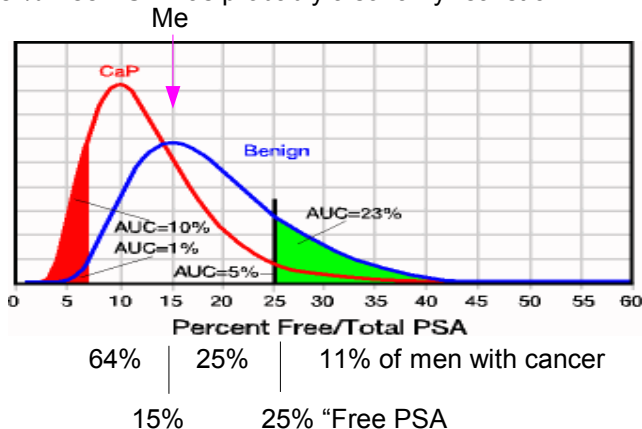
### % Free PSA

Neither my doctor nor the urologist mentioned anything to me about a "% Free PSA" test, which I learned about from the Internet. It is fairly new, but available locally.

I had a biopsy on Dec. 2, 2003, and waited 7 weeks for the prostate to heal before I asked for another PSA and % Free PSA blood test (Jan. 21, 2004). The PSA was 6.5, suggesting that the prostate was fairly stable again, so the %Free PSA was probably also fairly realistic.

I had **15% Free PSA**, which is a level suggesting that the irritation *might* be cancer.

For a man with no other clues, it would certainly be an alarm bell suggesting possible cancer, and the need for a biopsy if not already done.



According to the blood test sheet from the Vancouver Island Health Authority, men with proven prostate cancer will follow these statistics

**This is an unofficial, layman's guide**

*I am a retired science teacher,  
not a doctor*

## References

This guide is based on my experience and that of many friends, talking with doctors and nurses information from many science websites, etc.

**It is for general guidance only, so that men can be well informed when they talk to doctors.**

It is designed to make overhead transparencies for presentations, and was initially done for the Rotary Club of Sooke on 14 Jan 2004, ([SookeRotary.com](http://SookeRotary.com)), where I am a member.

I have adapted material and photos mainly from the excellent **Marin Urology**.

Don't rely on this presentation. **Talk to your urologist**, and visit websites, for more official and current information.

See my site, "[prostate.softwaves.net](http://prostate.softwaves.net)" for links to sites I used, especially Marin Urology.