The Manitoba Prostate Cancer Support Group encourages wives, loved ones, and friends to attend all meetings. Feel free to ask basic or personal questions without fear of embarrassment. You need not give out your name or other personal information.

The Manitoba Prostate Cancer Support Group does not recommend treatment modalities, medications, or physicians. All information is however freely shared.

Want to reach us by email?

manpros@mts.net

Thought For Today

"Health nuts are going to feel stupid some day, lying in hospitals dying of nothing."
- Arthur Wortzman

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Thanks!

Cancer Information Service

Call toll free:
1-888-939-3333 or 1-905-387-1153

When you call the toll free number of the Cancer Information Service, your questions will be answered by someone who understands how confusing the subject of cancer can be. All calls are kept confidential.

NEXT MEETING:

Thursday, September 18th, 2008 7 - 9 P.M.
Lisa Yereniuk  Melissa Polson  Kim Hodges
Dealing With Incontinence and Pelvic Floor Pain

Location: AUDITORIUM of the Seven Oaks General Hospital - Leila & McPhillips

www.manpros.org
Calling all men and the women who love them...

Prostate Cancer Awareness Evening

Tuesday, September 23, 2008 | 7pm to 9pm
Basic Medical Sciences Building | Theatre A | 730 William Avenue

FREE ADMISSION

Guest Speakers:
Dr. Anne Katz, Clinical Nurse Specialist
Dr. Graham Glezerson, Urologist
Dr. Jinka Sathy, Radiation Oncologist
Dr. Jeff Sisler, Family Practitioner
Norm Oman, Patient Advocate

September is Prostate Cancer Awareness Month
For more information or to obtain a helpful brochure please call 989-3433
Stanford Researchers Develop Model to Find Blood Biomarkers That Estimate Tumor Size

By KRISTA CONGER

(News-Herald.com) STANFORD, Calif. - In any battle, size matters. Identifying cancer in its infancy, before it spreads, will likely increase the odds of defeating it. However, no method currently exists to reliably translate the results of common blood-screening tests meant to suss out malignancy into the size of the tumor challenging both patient and doctor.

Now researchers at the Stanford University School of Medicine have begun to map out a way to correlate the levels of so-called blood biomarkers with cancer volume. The effort will guide the development of new tests to facilitate early detection of the disease.

“Early cancer detection is a very challenging but important goal for the cancer field,” said Sanjiv Sam Gambhir, MD, PhD, professor of radiology and senior author of the research published in the Aug. 18 issue of PLoS Medicine. “This modeling work enables a very deep understanding of the problems that will have to be solved for blood-based cancer biomarkers to be successful in this effort.”

Gambhir is also head of the Molecular Imaging Program at Stanford. He and radiologist Amelie Lutz, MD, developed the mathematical model using two common blood biomarkers: PSA, or prostate-specific antigen, which is often elevated in prostate cancer, and CA125, which serves as a marker for follow-up therapy in ovarian cancer. They found that the minimum tumor sizes predicted by their calculations roughly matched what is found in clinical practice, indicating that they are on the right track.

“We’re pretty happy that we came up with rather realistic tumor sizes,” said Lutz. “Although this is a very basic model, it should give researchers a tool to use when deciding if a particular secreted protein would be a good biomarker.”

Good biomarkers are eagerly sought in the quest for early cancer diagnosis. A number of things happen when a cell turns cancerous. It begins to divide when it shouldn’t, and it may start to make and secrete proteins into the bloodstream that non-cancerous cells around it do not. Ideally, physicians screening for cancer would be able to administer a simple blood test to identify even minute amounts of these proteins, or biomarkers, very early in the development of the disease and to initiate life-saving therapy.

In reality, however, cancers rarely provide such a foolproof “tell.” Because many biomarkers, including CA125 and PSA, are secreted by both healthy and cancerous cells, physicians and researchers assessing their levels in the bloodstream must make educated guesses as to where to assign the cutoff between the high end of normal and the low end of worrisome. Misjudging this number can lead either to unacceptably high numbers of false-positive results or to overlooking already dangerous disease.

Lutz used published data from cells grown in culture dishes to estimate how much CA125 or PSA is secreted into the surrounding cell growth media. The team then devised a mathematical model to translate the amount secreted by the cells into levels that could be expected to appear in the bloodstream for specific tumor volumes. If the marker is tumor-specific, the minimum detectable amount of biomarker in the bloodstream marked the smallest tumor that could likely be detected with this method. If the marker is secreted by both normal and cancerous cells, the threshold amount for suspicion is necessarily higher and the minimum detectable tumor size is larger.

By its very nature, the technique required many simplifications of what is a very complex biological process. But it worked surprisingly well. For example, because PSA is secreted by both normal and cancerous cells, the smallest prostate tumor predicted by the method is about the size of a small pea. If it were secreted only by cancer cells, PSA could possibly be used to detect tumors much smaller: about the size of the period at the end of this sentence.

“We’re making assumptions about how tumors behave in the human body,” said Lutz. “Although there’s not always a linear relationship between tumor size and secretion levels, our model identifies some important characteristics of a good biomarker. We also try to point out additional physiological parameters and studies needed to develop more precise models.”

With this approach, a protein that is highly secreted only by cancer cells would warrant further investigation. Also, a panel, or group, of good cancer-specific biomarkers is likely to be more clinically useful than just one protein, since not all tumors may express the same markers.

“It would be helpful to have a panel of biomarkers that complement each other,” said Lutz. “A lot of effort is going in to finding the perfect panel, and we hope that this work will help researchers home in on specific candidates.”

Lutz and Gambhir’s Stanford colleagues on the research include Juergen Willmann, MD, assistant professor of radiology; Frank Cochran, PhD, postdoctoral scholar; and Pritha Ray, PhD, research associate.

www.manpros.org
Radical Prostatectomy Reduces Prostate Cancer Mortality and Distant Metastases


These latest findings from the Scandinavian Prostate Cancer Group-4 (SPCG-4) are reported in the August 20 issue of the Journal of the National Cancer Institute. Lead author Anna Bill-Axelson, MD, from the University Hospital in Uppsala, Sweden, and colleagues point out that, to date, this is the only randomized trial to have shown a benefit for radical prostatectomy.

However, it is unclear how generalizable these results are to current prostate cancer patients in Western countries and especially in the United States, because men are now mostly diagnosed by screening for prostate-specific antigen (PSA). That was not the case for the men who took part in the SPCG-4 trial, which began in 1989 in Sweden. In that patient population, only 5% had their prostate cancer detected by PSA. The vast majority had palpable tumors, the researchers comment. In addition, the control group was observed with watchful waiting, whereas practice has now changed towards "active surveillance," which would also have an affect on the outcomes.

Nevertheless, the results from the SPCG-4 trial are "immensely important," comments an accompanying editorial by Timothy Wilt, MD, MPH, from the Minneapolis Veterans Administration Center for Chronic Disease Outcome Research in Minnesota.

"These results demonstrate that among men younger than 65 years whose prostate cancer is detected by methods other than PSA testing (eg, due to a digital rectal examination to evaluate urinary or other symptoms), cure with radical prostatectomy is possible, may be necessary, and should generally be recommended," Dr Wilt writes. "Results are less certain for men older than 65 years or with limited life expectancy due to comorbidities."

Latest Results Confirm Previous Findings

The SPCG-4 trial observed 695 men with clinically localized prostate cancer who were randomly assigned to either radical prostatectomy or watchful waiting.

The trialists last reported results in 2005, after a median follow-up of 8.2 years. At that time, they reported a relative reduction of 44% in prostate cancer mortality rates, 40% in the risk for metastases, and 26% in overall mortality rates in favor of radical prostatectomy.

The latest results, after a median follow-up of 10.8 years (range, 3 weeks to 17.2 years), confirm that finding. Analysis of these longer-term data showed a relative reduction of 35% in deaths from prostate cancer, 35% in the risk for metastases, and 18% in overall mortality rates in favor of radical prostatectomy.

The reductions in deaths from prostate cancer and of the risk for development of distant metastases were both statistically significant. At 12 years, 12.5% of men undergoing surgery vs 17.9% of men observed by watchful waiting had died from prostate cancer, giving a relative risk for 0.65 (P = .03). Also at 12 years, distant metastases were found in 19.3% men in the surgery group vs 26% of men in the watchful waiting group (relative risk, 0.65; P = .006).

Overall mortality rate in the 2 groups was not statistically different, although it favored surgery. At 12 years, 32.7% of men in the surgery group and 39.8% of men in the watchful waiting group had died (relative risk, 0.82; P = .09).

The cumulative incidence of death from prostate cancer remained constant beyond 9 years of follow-up, and the cumulative incidence of metastases remained constant beyond approximately 7 years of follow-up, the researchers comment.

A new and key finding from this latest analysis of the data is that almost all of the men in the radical prostatectomy group who died from prostate cancer had tumor growth outside of the prostate capsule, the researchers point out. Nearly half of the men who underwent surgery (132 [46%] of 284) were found to have extracapsular tumor growth, and they had a 14-fold higher risk for death from prostate cancer vs men without evidence of extracapsular growth (relative risk, 14.2; P < .001). "These men should be considered for postoperative radiotherapy," the researchers comment.

Ongoing Trials Will Provide More Data Soon

So far, the SPCG-4 study provides the only evidence from a randomized trial for the benefit of radical prostatectomy, the researchers point out.

Dr. Wilt notes that the only other randomized trial comparing surgery with watchful waiting, which began 40 years ago, failed to demonstrate a survival difference even at 23 years of follow-up (Scan J Urol Nephrol Suppl. 1995;172:65-72). However, more data should be available soon, he comments. (Continued on page 5)
Nearing completion is the US Prostate Cancer Intervention Versus Observation Trial, which has also compared radical prostatectomy with watchful waiting, but expands on SPCG-4 by including PSA-detected tumors and African American men.

Further back are 2 other trials addressing similar clinical questions. The Prostate Testing for Cancer and Treatment study in the United Kingdom is comparing conformal radiotherapy, prostatectomy, and active surveillance, whereas the Standard Treatment Against Restricted Treatment trial, currently in a feasibility study in Canada, plans to compare early interventions of surgery, external beam radiation therapy, or brachytherapy with active surveillance.

Results from these trials will add to those from SPCG-4 and, together with hopefully other large trials in the field, will provide information that has been long lacking on how best to treat localized prostate cancer, Dr. Wilt comments.

However, until the results of these other trials are available, the SPCG-4 provides the only evidence from a randomized trial for the benefits of a radical prostatectomy, the researchers emphasize.

The SPCG-4 study was funded by the Swedish Cancer Society and the US National Institutes of Health. The study authors have disclosed no relevant financial relationships. Dr. Wilt has disclosed no relevant financial relationships.

**Study Highlights**

- Patients eligible for study participation were seen in 1 of 14 centers in Sweden, Iceland, or Finland. All subjects had localized prostate cancer (stage T1 or T2) and were younger than 75 years of age. Participants also had PSA levels less than 50 ng/mL and negative results on bone scan.
- Study subjects were randomly assigned to receive radical prostatectomy or watchful waiting.
- Participants were observed every 6 months during the first 2 years and annually thereafter. All examinations included PSA tests, and bone scans were performed regularly every 1 or 2 years.
- The main outcomes of the study were overall mortality rate, death from prostate cancer, and the occurrence of distant metastases.
- 695 men with a mean age of 65 years were observed for an average of 10.8 years. Baseline characteristics were similar between randomly assigned groups.
- Only 12% of the study cohort had prostate tumors not detected by palpation.
- Compliance to the randomly assigned treatment in both groups was good.
- An interim analysis at a mean of 8.2 years of follow-up demonstrated that radical prostatectomy was superior to watchful waiting in all 3 main study outcomes.
- In the current analysis, 137 men in the radical prostatectomy group had died at the end of follow-up vs 156 men in the watchful waiting group. The 18% difference between groups in this outcome was not statistically significant.
- Rates of mortality from prostate cancer were 13.5% and 19.5% in the radical prostatectomy group and the watchful waiting group, respectively. The relative risk of 0.65 favoring radical prostatectomy in this outcome was significant.
- In a similar fashion, radical prostatectomy was superior to watchful waiting in the risk for distant metastases (relative risk, 0.65).
- Local recurrence or progression was nearly 24 times more common in the watchful waiting cohort vs the radical prostatectomy cohort.
- Radical prostatectomy was also associated with lower rates of use of hormonal therapy and palliative treatments vs watchful waiting.
- Baseline PSA score or Gleason score did not modify the main results of the study. However, a subgroup analysis of men younger than age 65 years demonstrated superior results for radical prostatectomy in overall mortality rates, death from prostate cancer.
and the occurrence of distant metastases. For men older than age 65 years, there was no difference between study groups in any outcome.

Only 2 men without evidence of extracapsular tumor growth on radical prostatectomy died from prostate cancer during follow-up. Furthermore, there were no deaths from prostate cancer in participants with a Gleason score between 2 and 6.

**Pearls for Practice**

- The routine use of PSA testing is associated with a doubling of the number of men diagnosed with prostate cancer. Most men younger than age 75 years with prostate cancer in the United States undergo radical prostatectomy, but prostate cancer remains the second leading cause of male cancer mortality.

In the current study of men with localized prostate cancer, radical prostatectomy reduced the risks for death from prostate cancer, distant metastases, and local recurrence and/or progression vs watchful waiting. However, rates of overall mortality were similar between the radical prostatectomy group and watchful waiting group.

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**Anne Answers**

As promised, Dr. Anne Katz answered the questions that remained from her presentation at the our meeting over the Summer.

**(Q)** Is there a spring-loaded injector for penile injections?

**(A)** The automatic injector is not available for Trimix as the device needs a special sealed tube containing the medication. These are available for insulin but not for Trimix. The pharmacist did think it was a good idea however!

**(Q)** The trimix used for injections needs to be refrigerated. Is it possible to use two of the three ingredients to get a less potent mix that does not need to be refrigerated?

**(A)** Bimix does not need refrigeration. It contains papaverine and phentolamine and can be made at Tache with a doctor's prescription. It may not work as well as Trimix but may do the trick if a couple is heading off on vacation!

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When you are in deep trouble, say nothing, and try to look inconspicuous.
Open Forum: Benefits of Prostate Cancer Screening Should Outweigh Risks

Shrey Desai  Wednesday, Aug. 20, 2008  Gazzete.net

It is hard to imagine that screening for early detection of prostate cancer could be harmful to certain individuals. So, it is important for us to understand why the U.S. Preventive Service Task Force (USPSTF), a federal government panel, recommended against doing prostate cancer screening for men more than 75 years of age due to concerns regarding its potential harm.

Also, prostate cancer is an important public health problem as it was the most commonly occurring cancer in the Montgomery County as per the latest Cancer Report published by the Maryland Department of Health and Mental Hygiene. Montgomery County had the second highest number of new prostate cancer cases in Maryland as per the same report.

Prostate cancer screening entails doing a rectal exam and a simple blood test, Prostate Specific Antigen (PSA). The main goal of a screening test is to detect diseases before the symptoms develop. Mammography is an example of such a screening test for the breast cancer.

A good screening test is able to detect disease at an early stage and early treatment should result in reduction of risk of death. There is a general consensus that the prostate cancer screening test can detect cancer at an early stage. But there has been a long standing controversy as to whether or not the early diagnosis of prostate cancer does always help to reduce risk of death. The reason is that some of the early, slow growing prostate cancers may not cause any symptoms or even death.

The concerns about doing prostate cancer screening is related to potential harm of further tests and treatment, which your doctor usually obtains after having abnormal screening test. Potential side effects of the treatment are impotence, urinary incontinence and death. Therefore, it is important to have guidelines for doctors and patients to weight risks and benefits of screening test before they have one.

The USPSTF is an independent panel of experts who systematically review medical literature to provide guidelines regarding preventive services. It recently concluded that the harm of doing prostate screening for men more than 75 years of age outweighed the benefits. USPSTF found a small, if any, benefit of early detection, but substantial harm (as mentioned above) of screening in men more than 75 years of age. Many of these men with abnormal results may ultimately die "with" prostate cancer rather than die "due" to cancer, if they choose not to have treatment. Considering the evidence, the panel recommended against doing prostate cancer screening for men more than 75 years of age.

Unfortunately, there is a disagreement among various medical professional associations regarding the matter. The American Cancer Society and American Urologic Association continue to recommend screening after discussing risks and benefits with the patients irrespective of their age. Additionally, the USPSTF found insufficient evidence to recommend for or against the screening for men younger than 75 years of age. This disagreement reflects lack of good quality evidence regarding the issue of prostate cancer screening.

So, what is the bottom line? First, you should discuss the risks and benefits of prostate cancer screening with your doctor, especially if you are older than 75 years of age. The benefit of the screening should overweight the risks if you have the test. At the same time, you should continue to have screening for other diseases such as colon, cervical and breast cancer because there is consensus among all major professional associations regarding benefits of such testing. Also, these recommendations are only for those patients who do not have any symptoms. You should seek medical attention if you have any symptoms related to prostate cancer.

Shrey Desai, MD, MPH, of Silver Spring is an internist who is also trained in the area of public health. He is currently working at the Johns Hopkins University.

...
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