Celebrating 28 years of support Association of New Mexico Celebrating 28 years of supporting men PCSANM Quarterly April 2019 Volume 26, Issue 2		
Issue HighlightsInformation2New Computer Model Enables Researchers to Predict Course of Disease3Three Years More After Surgery4Cancer Mortality Continues to Spiral Downward6Axumin PET Scans8Risk Higher in Men with IBD11PCa Treatment May Increase Risk of Heart Failure11	Dear Readers: For years, Lifeline has been under the very abl Jerry Cross. Jerry has done an excellent job int prostate cancer diagnosis, treatment, and releve members and many newsletter readers have ex on this publication. For personal reasons, Jerry editorship and from the Board of Directors. W years of dedicated service to this organization. Ann Weinberg and I will jointly assume respon newsletter. We will seek out articles that cover new scans, new treatments and the repurposing will also encourage our local doctors and facili- their practices. In addition, so we may best ser topics of interest or concern with us. Please en pchelp@pcsanm.org. We look forward to hear	le editorship of Board Member forming Lifeline readers about ant issues. Fellow board apressed gratitude for his work y has decided to retire from the greatly appreciate Jerry's nsibility for creating this r new diagnosis techniques, g of existing treatments. We ities to submit articles about we you, we invite you to share nail your suggestions to ring from you.
Chairman's Message12Our website address: www.pcsanm.org Email us: pchelp@pcsanm.org	Thank you, Lou Reimer Programs Chairman/Lifeline Editor	
Support Meetings: PCSANM meets at Bear Canyon Senior Center, 4645 Pitt St NE in Albuquerque. This is two blocks from Montgomery and Eubank; go north one block to Lagrima de Oro St, and east one block to Pitt, and left 50 yards to the Bear Canyon parking lot. We are in room 3 or 5, at the west end of the building. Meetings are usually the first and third Saturdays of the month from 12:30-2:45 pm. Map is at http://binged.it/1baQodz	In 7 Mer In the US will develop cancer in his life	prostate time.

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In Memory of

With deep sympathy and regret, we list this name:

James Kennacott Lawrence Morrell

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Prostate Cancer: New Computer Model Enables Researchers to Predict Course of Disease

Source: - Charité - Universitätsmedizin Berlin

Summary

How does a normal cell turn into a deadly cancer? Seeking an answer to this Question researchers examined the tumor genomes of nearly 300 prostate cancer patients. Their findings describe the ways in which changes in the prostate cells' genetic information pave the way for cancer development. Using a newly developed computer model, it is now possible to predict the course of the disease in individual patients.

Full Story

How does a normal cell turn into a deadly cancer? Seeking an answer to this question, and working alongside other international working groups, researchers from Charité -- Universitätsmedizin Berlin examined the tumor genomes of nearly 300 prostate cancer patients. Their findings describe the ways in which changes in the prostate cells' genetic information pave the way for cancer development. Using a newly-developed computer model, it is now possible to predict the course of the disease in individual patients. It is hoped this will enable clinicians to develop tailor-made treatments. On Monday, 10 December 2018, the results of this study were published in the latest issue of the journal *Cancer Cell*.

In Germany, prostate cancer is the most common malignancy in men, with close to 60,000 new cases diagnosed every year. These tumors are usually slow-growing, meaning that not all patients require immediate treatment. Until recently, physicians had been unable to distinguish between benign and aggressive forms of the disease, particularly when dealing with tumors diagnosed at an early stage in the disease process.

Working alongside a number of other research groups from within Germany and abroad, Charité-based researchers helped to develop criteria that would make this type of classification possible. To do so, they studied the molecular profiles of close to 300 prostate tumors. They sequenced the information encoded within the cells' genetic material, recorded chemical changes to the genetic code, and measured the activity of specific genes within cancerous tissues. An analysis of their data has shed light upon the temporal order of mutational events involved in the development of prostate cancer. "We were able to identify tumor subtypes that progress at different rates and therefore require different types of treatment," says one of the study's lead authors, Prof. Dr. Thorsten Schlomm, Director of Charité's Department of Urology.

He adds: "We now know which of these mutations occur first, initiating the process of change from prostate cells to tumor cells, and which of them are more likely to follow later." The researchers then used these results to develop a computer-based model capable of predicting the likely course of the disease in individual patients. "When an individual patient's tumor shows a specific mutation, we are now able to predict which mutation is likely to follow, and how good the patient's prognosis is," explains Prof. Schlomm. "Our team is currently busy incorporating our computer model into the treatment process at Charité. This will enable clinicians to model a particular treatment's likelihood of success. As for the timescale involved, we expect it will take two to three years for this algorithm-based method to become clinical routine."

In an effort to improve the reliability of prognoses, the research consortium is planning to spend the next few years collating additional data on thousands of patients, which they will then use to further develop and enhance their computer model. They will achieve this by working with Berlin's newly established urology network (Hauptstadt-Urologie-Netzwerk), which brings together urology specialists from Charité and private practice. Their ultimate aim is to make it easier for physicians to decide on the most suitable treatments for individual patients.

Prostate Cancer: 3 Years More After Surgery

By Alexander M. Castellino, PhD

New longer-term data from a Scandinavian trial show that men with clinically detected prostate cancer who underwent radical prostatectomy lived an additional 2.9 years compared to patients who underwent watchful waiting.

The finding, from the Scandinavian Prostate Cancer Group Study Number 4 (SPCG-4), was published online December 13 in the *New England Journal of Medicine*.

In the SPCG-4, which was conducted from October 1989 through February 1999, patients with localized prostate cancer were randomly assigned to undergo watchful waiting or radical prostatectomy. Follow-up data were collected through 2017.

"It is pretty amazing that after 29 years since the study started, 20% of the men are still alive, and only 30% have died from prostate cancer," corresponding author Anna Bill-Axelson, MD, associate professor and consultant in urology at Uppsala University, Sweden, told *Medscape Medical News*. "Prostate cancer is a slow-growing tumor in most cases, and in order to benefit from radical prostatectomy, the patient needs to develop a lethal disease and be healthy enough not to die from something else," she added.

Men were eligible to be enrolled in SPCG-4 if they were younger than 75 years, had a life expectancy of more than 10 years, and had no other known cancer that was likely to shorten survival. In addition, their prostate-specific antigen (PSA) level had to have been <50 ng/mL, and they had to have had localized disease. "Within the era in which this study was conducted, most of these men would have been considered as intermediate risk," Anthony V. D'Amico, MD, from Brigham and Women's Hospital and the Dana-Farber Cancer Institute, Boston, Massachusetts, told *Medscape Medical News* when approached for comment.

Since the time of the study, multiparametric MRI arrived. "These data serve to raise awareness that before a man undergoes active surveillance or observation for low-risk prostate cancer, multiparametric MRI should be suggested in order to identify occult, grade 4 or higher prostate cancer, as these men are at increased risk for death if they are otherwise in good health and not treated," he added.

Bill-Axelson told *Medscape Medical News* that, in light of the fact that 70% of the patients did not die from prostate cancer, many would probably be candidates for active surveillance today. "The diagnostic work-up at that time was limited with only a few biopsies, so a large number were undergraded compared with today," she said. "MRI that is used today makes grading more accurate, but may also result in an upgrading that will result in overtreatment," she added. "The introduction of MRI is a paradigm shift," she said. It now makes all previous studies that were based only on biopsies somewhat difficult to interpret, she added.

Details of the SPCG-4 Study Results

In the Scandinavian trial, 695 men with localized prostate cancer were randomly assigned to undergo either radical prostatectomy (n = 347) or watchful waiting (n = 348) from October 1989 to February 1999. After the first 2 years, patients underwent an annual follow-up examination. "No patient was lost to follow-up, and annual follow-up continued through 2017," Bill-Axelson told *Medscape Medical News*.

The median age at enrollment was 65 years. Only 12% of men had nonpalpable stage T1c tumors at inclusion. The mean PSA level was 13 mg/mL.

Median follow-up was 23.6 years (range, 20 days - 28 years); maximum potential follow-up was 29.3 years. A total of 85% of men in the treatment arm underwent radical prostatectomy; 15% in the watchful waiting group later underwent treatment with curative intent.

At 23 years, the cumulative incidence of death from any cause was higher in men who received watchful waiting, at 83.8%, vs 71.9% for the patients who underwent prostatectomy (absolute difference, 11.9%). With a hazard ratio (HR) of 0.74, the men who underwent prostatectomy were at a 26% reduced risk for death from any cause (P < .001). The SPCG-4 investigators report that this endpoint (death from any cause) was significant for men younger than 65 years (HR, 0.62; 95% confidence interval [CI], 0.48 - 0.80) but not for those aged 65 and older.

The cumulative incidence of prostate cancer death was also higher for men who underwent watchful waiting, at 31.3%, vs 19.6% for those who underwent prostatectomy (absolute difference, 11.7%; HR, 0.55; P < .001)

Distant metastases were experienced by more men who received watchful waiting, at 43.3%, vs 26.6% for those who underwent prostatectomy (P < .001).

The benefits of radical prostatectomy with respect to prostate cancer death and distant metastases were also seen in men aged 65 years and older.

Of all histopathologic measures, only the presence of extracapsular extension was associated with a fivefold increased risk for death from prostate cancer.

The researchers note that per-protocol analyses, which took into account nonadherence to therapy, provided similar results as the intent-to-treat analyses.

Comparing Long-term Results Across Trials

In their article, Bill-Axelson and colleagues comment on how their trial results compare with those of others.

The Prostate Cancer Intervention Versus Observation Trial (PIVOT), which compared prostatectomy with observation, showed a relative risk reduction of 0.65 for death from prostate cancer after prostatectomy compared with observation at a follow-up of 19 years. This is similar to what was seen in the SPCG-4 trial after 10 years of follow-up, they note. However, the "absolute difference in risk was only 4 percentage points, reflecting the low baseline risk," they add. "Only long-term follow-up can reveal whether the PIVOT results will catch up with the SPCG-4 results after passing of the lead time associated with PSA testing or whether they will remain unchanged as a result of a substantial overdiagnosis of nonlethal prostate cancer," the researchers comment.

The Prostate Testing for Cancer and Treatment (ProtecT) study compared prostatectomy with active surveillance in men with PSA-detected prostate cancer. This study found a 0.63 relative risk for death from prostate cancer at 10 years after radical prostatectomy compared with active surveillance

Because active surveillance entails curative treatment when such treatment is indicated, this trial in fact effectively compared immediate curative treatment with delayed curative treatment, Bill-Axelson and colleagues point out. The event rate was still low, with only 1% of men dying from prostate cancer in 10 years. That suggests "an even longer lead time and possibly a greater degree of overdiagnosis than in PIVOT," they comment. "The length of time for a more substantial benefit to occur even among men with more advanced tumors, as in our trial, highlights the importance of carefully selecting men who might benefit from curative treatment and not treating the small, low-risk tumors often diagnosed today, unless they show signs of progression during active surveillance," the SPCG-4 investigators write.

Watchful Waiting and Active Surveillance: Still Appropriate for Some

Bill-Axelson told *Medscape Medical News* that watchful waiting is still used for men whose life expectancy is less than 10 years. "As in ProtecT at 10 years, less than 1% of men have died from prostate cancer, so in older men with low-intermediate-risk disease, this is still an option," she said. "With watchful waiting, which is what we studied in SPCG -4, no curative treatment is intended, only symptomatic treatment with hormones if the patient develops metastases," Bill-Axelson said. "This is still used in men with other diseases who have a short life expectancy," she added.

In active surveillance, curative treatment is postponed until the tumor shows signs of becoming more aggressive on repeat biopsy, while the cancer is still localized to the prostate, Bill-Axelson explained. "That is what should be used in all men with low-risk disease and favorable intermediate-risk disease to reduce overtreatment," she said.

In Sweden today, more than 80% of men with lowrisk disease start on active surveillance, she added.

Prostate Cancer Foundation

According to the Prostate Cancer Foundation (PCF), active surveillance protocols should include PSA testing, digital rectal examinations, and serial prostate biopsies. Ancillary radiologic and genomic tests are investigational but may have a role for patients with discordant clinical and/or pathologic findings.

The PCF recommends that patients be monitored regularly for signs of progression. It recommends that PSA testing and digital rectal examinations be performed once or twice a year, and that a repeat biopsy of the prostate be performed every 1 to 5 years. If there is evidence that the cancer is progressing, treatment may be warranted.

The foundation also notes that in men with low-risk prostate cancer who have been on active surveillance for 10 to 15 years after diagnosis, rates of the spreading of disease or of dying of prostate cancer are low. As an example, the PCF cites a Johns Hopkins study of the use of active surveillance. That study found that after 15 years, fewer than 1% of men had developed metastatic disease.

Current guidelines from the American Society of Clinical Oncology (ASCO) indicate active surveillance as the recommended option for most patients with low-risk prostate cancer. Active surveillance recommendations include follow-up biopsy at 6 to 12 months to confirm eligibility, then every 2 to 5 years.

Active surveillance is more controversial for intermediate-risk patients, who have a higher risk of developing metastatic disease, the ASCO guidelines note. These patients should be counseled regarding the higher risk of the cancer progressing without treatment, they add.

The study was supported by grants from the Swedish Cancer Society, the National Institutes of Health, the Karolinska Institute, the Percy Falk Foundation, and the Örebro County Council.

N Engl J Med. Published online December 13, 2018.

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Cancer Mortality Continues to Spiral Downward in the US

By Pam Harrison

CA Cancer J Clin. Published online January 8, 2019

Mortality rates from the most common cancers continue to decline across the United States, with several notable exceptions, including liver cancer in men and especially in women, and also uterine cancer in women. These findings come from the latest American Cancer Society annual report on cancer rates and trends, "Cancer Statistics 2019."

The report was published online January 8 in CA: A Cancer Journal for Clinicians.

Overall cancer death rates dropped by 27% in the 25 years from 1991 to 2016, Rebecca Siegel, MPH, scientific director of surveillance research, American Cancer Society, Atlanta, Georgia, and colleagues report.

There are approximately 2,629,200 fewer deaths from cancer now than would have been expected had death rates remained at their peak, the researchers observe.

The number of averted deaths is greater for men than for women because the total decline in cancer mortality has been steeper for men than for women (34% vs 24%), they point out.

People living in the poorest counties of the country are experiencing a disproportionate burden of the most preventable cancers, including cervical, lung, liver, and colorectal cancer (CRC). The mortality rates for these cancers are considerably higher than they are for residents in more affluent counties, the authors note.

Nearly 1700 Deaths Each Day

Despite the downward trend for cancer mortality, the disease continues to kill. The authors estimate that in 2019, 606,880 US residents will die from cancer — corresponding to nearly 1700 deaths per day.

April 2019

PCSA LIFELINE

The greatest number of deaths are from cancers of the lung, prostate, and colorectum in men and the lung, "breast, and colorectum in women," Siegel and colleagues note. One quarter of all cancer deaths are from lung cancer, they add.

That said, the incidence of lung cancer continues to decline twice as quickly among men than among women, a reflection of an uptick in smoking by women in some birth cohorts.

The death rate for lung cancer dropped by 48% from 1990 to 2016 among men and by 23% from 2002 to 2016 among women. The decline in lung cancer deaths accelerated among both sexes in recent years.

For breast cancer, death rates dropped by 40% from 1989 to 2016. Mortality for prostate cancer declined by 51% from 1993 to 2016.

Death from CRC also dropped by a similar percentage, at 53%, although the trajectory of the decline in CRC deaths was longer than it was for prostate cancer, from 1970 to 2016.

Overall, the incidence of cancer during the past decade has declined by approximately 2% per year in men; for women, the incidence rate has remained relatively stable during the past few decades.

Liver Cancer Rates Are Increasing

In contrast to overall cancer trends, rates of liver cancer are increasing faster than for any other cancer in both men and women, as has been reported previously.

This is disturbing, the study authors suggest, because risk factors for liver cancer, which include obesity, excess alcohol consumption, smoking, and hepatitis B and C infection, are all potentially modifiable. As such, many cases of liver cancer could be prevented, they argue.

Some 75% of individuals affected by liver cancer are baby boomers, the researchers note.

One-time hepatitis C screening has been recommended for this age group, but in 2015, only a small percentage of baby boomers had been screened for the infection. The problem is further compounded by the opioid epidemic — a threefold spike in hepatitis C infection was reported to the Centers for Disease Control and Prevention from 2010 to 2016, researchers add.

High Survival Rates for Common Cancers

For all stages of cancer combined, "survival is highest for prostate cancer (98%), melanoma of the skin (92%), and female breast cancer (90%)," Siegel and colleagues note.

In contrast, 5-year survival rates are lowest for cancer of the pancreas, at 9%; liver cancer, at 18%; and cancer of the esophagus and lung, both at 19%.

For children and adolescents, overall cancer incidence rates have been increasing very slightly, by 0.7% per year, since 1975.

However, death from cancer in those age groups has been on the decline for many decades, to the point where now, children and adolescents are more than 60% less likely to die of their cancer than they were in 1970.

"Much of this progress reflects the dramatic 78% decline in leukemia mortality, from 2.7 per 100,000 children and adolescents in 1970 to 0.6 in 2016," the researchers observe.

Racial Differences Narrowing, but Socioeconomic Inequalities Loom

Five-year relative survival rates for all cancers diagnosed from 2008 to 2014 were roughly equal between whites, at 67%, and blacks, at 62%.

However, "after adjusting for sex, age, and stage at diagnosis, the relative risk of death after a cancer diagnosis is 33% higher in black patients than in white patients," the researchers observe.

The discrepancy in cancer death rates is even greater for American Indians and Alaska Natives, who are 51% more likely than white patients to die of their disease.

Although the racial gap in cancer mortality rates is slowly narrowing, socioeconomic inequalities are widening. This gap is characterized by significantly higher cancer mortality rates among the poor. YouTube

Axumin PET Scans: A Breakthrough for Prostate Cancer

By Mark Scholz, MD | Reviewed by board-certified physician

Axumin is an FDA-approved, Medicare-covered scan that can achieve early detection of recurrent prostate cancer after surgery or radiation. For years we have been able to detect prostate cancer recurrences with PSA, but standard body and bone scans have been unable to determine the *location* of the cancer until the PSA level is excessively elevated (10 to 30 or higher).

Axumin can detect recurrent disease with PSA levels less than 10 and sometimes much lower, which is the reason this scan is such an important development.

Why Is Axumin So Important?

Being able to detect early metastatic disease with a scan offers two important therapeutic advantages. First, the knowledge of where the cancer is located can help guide effective therapy to that specific area of the body and limit damage to other areas of the body. The scan detects where the cancer is not present and where treatment is not needed.

The second valuable contribution that an accurate scan offers is a deeper insight into the disease process itself—revealing whether or not the cancer has metastasized, and if it has metastasized, to what degree.

Recurrent cancer signaled by a rising PSA is not always due to metastases. Sometimes the cancer remains near or in where the prostate used to be, so PSA is coming from cancer recurring in the prostate gland after radiation or in the prostate fossa after surgery (the fossa is the area of the body where the prostate was located prior to surgical removal), which is known as a "local recurrence."

PSA can also be elevated due to growing cancer that has metastasized to the lymph nodes or bones. This is called a "systemic recurrence." Systemic recurrences are tremendously more dangerous than local recurrences. Why? A metastasis shows that the cancer has the biologic capacity to spread around the body a process that ultimately leads to death in more than half of prostate cancer patients. Thus, knowing the location of the recurrence answers an extremely important question: whether the recurrent disease is aggressive enough to metastasize.

As we have said, the capacity for cancer to spread is what makes the cancer truly dangerous. This knowledge frees the physician to implement a much more aggressive medical treatment protocol without reservations related to the fear of over-treating. If the recurrent disease is *localized* to the prostate or prostate fossa, such an aggressive treatment approach would be unwarranted and unnecessarily toxic.

Aggressive treatments can be associated with serious side effects. However, the type of aggressive treatments I am talking about are medications that circulate in the blood and have an anticancer effect in the whole body, of which chemotherapy with Taxotere or hormonal therapy with Lupron and Casodex are good examples.

How Does Axumin Work?

Standard bone scans use calcium-related radioactive substances that concentrate in areas of the bone irritated by the cancer. The Axumin PET scan works by detecting the *metabolic activity of the cancer itself*.

Axumin exploits the fact that prostate cancers absorb amino acids at a much more rapid pace than normal cells. Axumin consists of a radioactive tracer linked to an amino acid. Since the cancer cells absorb the amino acids more avidly than normal cells, the radiation concentrates inside the tumor cells. When the patient is placed under a scanner the location of high areas of radiation signal the location of the cancer in the patient's body.

How Is the New Information Provided by Axumin Utilized?

The Axumin scan is approved for men who have developed a rising PSA after previous radiation or surgery. Historically, simple bone scans and CAT scans required PSA levels in the 10 to 50 range before enough cancer to be present to be detected on a scan. The beauty of the Axumin PET scan is that it offers the possibility of detecting small metastatic lesions in the lymph nodes with PSA levels in the 1 to 10 range.

The other potential application of the Axumin scan, apart from its usefulness for determining the area of PSA relapse, is for men who have undergone chemo-hormonal treatment for advanced metastatic disease. After treatment, men may achieve a sharp reduction in PSA—perhaps from the 100s down to 10 or less. The Axumin scan can potentially single out an area of cancer in the body that is manifesting persistent metabolic activity, a sign that the cancer cells remain viable despite recent treatment with Lupron and Taxotere. If a relatively limited number of areas of persistent metabolic activity are detected, it is possible that such patients could benefit from spot radiation or other forms of treatment directed at the residual disease.

Future Uses: Even though the scan has only first been approved for use in the setting of a PSA relapse, other applications are likely to be utilized in the future. The foremost would be for staging men who are newly diagnosed with Gleason scores of 8 or higher or in men with elevated PSA levels above 20. Detecting early metastatic disease in the lymph nodes in newly-diagnosed men is a high priority. Patients who have metastatic disease detected have higher cure rates if they receive aggressive therapy with Taxotere and Lupron. Patients who are free of such metastasis can forego aggressive treatment and limit their side effects without reducing their cure rates.

Interpreting the Scans: Interpretation of these new scans is going to involve a learning curve for the doctors who read the scans. This is the case with any new technology. It is also important for patients to realize that the type of technology for performing those scans—i.e., the scanners themselves—will vary from practice to practice. Some practices have older technology and the capacity to detect small metastatic sites will be less efficient.

Realizing these limiting factors, it will be important for patients to identify centers that are using state-ofthe-art equipment and have experienced physicians who are doing a larger number of scans. These centers of excellence are likely more knowledgeable to read these scans properly.

Working Hand-in-Hand With Other Technologies: Another reason why Axumin is an important breakthrough is that it helps doctors exploit the full capabilities of Intensity Modulated Radiation Therapy (IMRT). IMRT is an extremely precise type of radiation technology that can target many areas of the body that were previously inaccessible to radiation. IMRT is so accurate that doctors can aim the radiation beam with millimeter accuracy and completely avoid damage to closely approximated sensitive structures such as intestines, for example, in patients with lymph node disease in the abdomen. One of the reasons Axumin PET scanning is so exciting is because it actually makes another existing technology, IMRT, even more useful.

Increased Hope for the Future

The advent of improved cancer scanning with Axumin increases hope that other new types of scanning breakthroughs will be coming in the near future. For example, other types of PET scans, one in particular called PSMA, targets a specific molecule that is commonly present on the surface of prostate cancer cells. The potential advantage of PSMA extends beyond its usefulness for imaging; it has a potential therapeutic application as well. PSMA ligands can be linked to more powerful radioactive substances that are strong enough to kill the cancer cells.

The prostate cancer community eagerly waited for scans to identify prostate cancer's location in the body with the type of accuracy that these PET scans can achieve. These scans represent a remarkable breakthrough. Now that the FDA has approved this technology, insurance companies start exploring ways to offer coverage. Medicare was the first insurance company to cover it.

What Are the Previous Breakthroughs?

Axumin is perhaps the biggest prostate cancer breakthrough for 2017, but you might also wonder about the most important developments during the last three years. First, the increasingly rapid pace of new discoveries is a newer development, but other breakthroughs include:

- The 3-Tesla, multi-parametric prostate MRI imaging
- Xofigo
- Xtandi

Why Are Breakthroughs Occurring More Frequently?

The reason for the acceleration in the frequency of breakthroughs is the culmination of extensive basic research leading to a deeper understanding of cellular biology of prostate cancer. More specifically, the specific genetic mutations that cause uncontrolled cellular growth have been elucidated.

Mutated genes are what makes cancer cells different from normal cells. Now that these mutations can be identified, new medications can be designed to compensate for the abnormally functioning genes. Think of how a software patch might be written by a computer programmer to fix a computer glitch.

In prior years, before our arrival at our present-day understanding of cell biology, new medicines were the result of an arduous, trial and error developmental process. A randomly selected chemical would be administered to cancer cells growing in Petri dishes. If the chemical caused the cancer cells to die, it would be administered to animals with cancer. If the cancer regressed and the animal lived, it would be tested in humans. Successful human trials would then lead to FDA approval and the commercial availability of a new treatment.

Unlike the rationally-designed medications of recent times, the way that these medications discovered by trial and error function was often unknown.



Cancer Mortality

For example, the rate of mortality from cervical cancer among women living in poor counties is twice that among women living in affluent counties. Mortality from both lung and liver cancer among men living in poor counties is more than 40% higher than it is for men living in wealthier counties.

In the early 1970s, mortality rates from CRC among men in the poorest counties were about 20% lower than they were for men living in wealthy counties; now, rates are 35% higher for men living in the poorest counties, the investigators point out.

Indeed, it has been estimated that approximately one third of cancer-related deaths in residents aged 25 to 74 years could be avoided if socioeconomic disparities were eliminated.

The authors point out that residents living in the poorest counties are far more likely to engage in the kind of behaviors that give rise to cancer. For these persons, rates of smoking and obesity are twice those of people living in the wealthiest counties.

This is reflected by geographic variations in the incidence of cancer. For example, lung cancer rates in Kentucky are about 3.5 times higher than they are in Utah, and smoking rates are the highest in Kentucky and the lowest in Utah, the investigators note.

"A broader application of existing cancer control knowledge with an emphasis on disadvantaged groups would undoubtedly accelerate progress against cancer," Siegel and colleagues suggest.



Medscape December 28, 2018

Prostate Cancer Risk Higher in Men With IBD, Study Confirms

By Anne Harding

NEW YORK (Reuters Health) - Men with inflammatory bowel disease (IBD) are four to five times as likely as their peers without IBD to develop clinically significant prostate cancer, according to a new study.

"We have to study this further, but since these patients with inflammatory bowel disease are getting frequent colonoscopies and frequent exams, it may be worthwhile to see that a good prostate exam is performed, but again, we do have to validate this in future studies," Dr. Shilajit D. Kundu of Northwestern University Feinberg School of Medicine in Chicago told Reuters Health by phone.

Epidemiological research has linked IBD to prostate cancer, but the association has not been studied in the prostate-specific antigen (PSA) era, Dr. Kundu noted.

Screening for prostate cancer with PSA testing is "controversial," he and his colleagues write in European Urology, online December 4.

The study team compared 1,033 male IBD patients who underwent prostate cancer screening at their medical center in 1996-2017 to 9,306 controls who did not have IBD.

Ten-year prostate cancer incidence was 4.4% for men with IBD compared to 0.65% among controls (hazard ratio, 4.84; P<0.001); for clinically significant prostate cancer, the incidence was 2.4% and 0.42%, respectively (HR, 4.04; P<0.001).

Men with IBD also had higher average PSAs than men without IBD starting at about age 55.

"Not only do men with inflammatory bowel disease have an increased risk of cancer, they have an increased risk of clinically significant cancer that would warrant treatment," Dr. Kundu said. From: Cleveland Clinic -Heart Advisor -February, 2019

Prostate Cancer Treatment May Increase the Risk of Heart Failure

Men with prostate cancer undergoing androgen deprivation therapy (ADT) for more than six months are highly likely to develop heart failure with one year, researchers have found. A look at 3,050 men with prostate cancer in a database found the incidence of heart failure was 72 percent higher among those treated with ADT than in those who had not. When the incidence of hypertension, coronary artery disease, income and urban versus rural lifestyle were adjusted to match the two populations, the risk of heart failure was 92 percent higher among ADT users. The risk remained higher for two or three years and was significantly greater among men with valve disease. ADT can prolong survival in men with metastatic prostate cancer and those receiving radiation therapy. In others, the risks of ADT should be weighed against any potential benefit (Journal of Clinical Pharmacology, Nov. 7, 2018).

Continued from previous column

While doctors may assume that an elevated PSA in an IBD patient is related to the disease, he added, "if a man with inflammatory bowel disease who feels OK has an elevated PSA, we shouldn't necessarily assume that it's just coming from inflammation of his gut. It may be a sign that he should be checked for prostate cancer."





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A Message from the Chairman

April 2019

It is well into 2019 and PCSANM is apparently more effective than ever. We have seen a marked increase in the number of one-on-one consultations in the first six weeks of the year and a definite uptick in the number of men attending our Saturday meetings. Which is to say that our outreach efforts are working. Many say they have seen our sponsorship of KNME news on Mondays. Others say either their doctor or a friend referred them. However, we are not reaching everyone who could benefit from our services.

There are approximately 1000 new cases of prostate cancer diagnosed each year in New Mexico but we are only talking to 10 to 15 percent of them. We have the capacity to educate more but if they don't call we can't share with them. We would like to see more referrals and we are working to that end. We need your help. Next time you have a discussion with a friend or acquaintance and the subject of prostate health comes up, please tell them about PCSANM. In addition, if you belong to an organization that is looking for speakers we have presentations that we can tailor to the organization's demographic.

The bottom line is we have services that aren't being fully utilized and we need you to help us spread the word. However, this is two-edged sword and if we increase our reach, we will need to increase our volunteer base. Please consider helping one way or another.

Steve Demi

Chairman of the Board, PCSANM