WRNMMC Us TOO, Inc.

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NEWSLETTER

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♦ DROP IN PROSTATE CANCER DEATHS ♦

While more men are being diagnosed with the prostate cancer, fewer are dying from the disease. Data from the North American Association of Central Cancer Registries and the National Center for Health Statistics, Centers for Disease Control and Prevention show that in 2012, incidence rates of prostate cancer will increase slightly, while death rates from the disease will decrease. In 2011, it is estimated that 33,720 men died from the disease, while 28,170 are expected to die in 2012 – a more than 15 percent decrease. This can be attributed to both the effectiveness of early detection efforts and research that has lead to advances in treatment.

"This year alone, more than 241,000 men will be diagnosed with prostate cancer and more than 28,000 will die from the disease," said Skip Lockwood, CEO of ZERO — The Project to End Prostate Cancer. "We are seeing the death rate decrease, but we must remain vigilant in the fight against this disease by increasing research funding, raising awareness and education, and testing men with risk factors."

In the U.S., a baby boomer turns 50 every 8.5 seconds, making the risk pool for prostate cancer larger and larger. ZERO provides free prostate cancer testing to at-risk men across the country through the Drive Against Prostate Cancer. Because of early detection efforts like the Drive, more than 90 percent of prostate cancers are discovered in the local or regional stages. When detected in these early stages, the survival rate for prostate cancer approaches 100 percent.

Over the past 25 years, the 5-year relative survival rate for all stages of prostate cancer combined has increased from 68 percent to almost 100 percent, which can be attributed to the widespread use of the PSA blood test for the disease. According to the most recent data, 10- and 15-year relative survival rates are 98 percent and 91 percent, respectively.

Research at the Department of Defense's (DOD) Prostate Cancer Research Program (PCRP) has lead to the discovery of new drugs to fight late-stage prostate cancer. Xgeva and Zytiga, both approved in the past two years, are now viable options to extend men's lives. ZERO works with the federal government to protect the valuable bench to bedside research done at the DOD, and was instrumental in keeping the PCRP funded at $80 million for fiscal year 2012.

For reasons that remain unclear, prostate cancer incidence rates are significantly higher in African Americans than in Caucasians, and death rates in African Americans remain more than twice as high as those in Caucasians. Other risk factors for prostate cancer include age and family history of the disease.

Studies suggest that a diet high in processed meat or dairy foods may also be a risk factor. Obesity may increase the risk of aggressive prostate cancer, and obesity and smoking are associated with an increased risk of dying from the disease.

ZERO believes that men should take a proactive approach to their health, and discuss prostate cancer risk factors and testing options with their doctor. (Source: ZERO-Project to End Prostate Cancer; Washington, DC; February 7, 2012)

♦ *INSIDE THIS ISSUE* ♦

Next Speaker. . . . . Page 2
Prostate-Specific Issues . . . . Page 3
Dr. Robert C. Dean . . . . . Page 7
Counselors Listing . . . . . Page 14

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♦ FROM THE EDITOR'S DESK ♦

We recently learned of two prostate cancer-related websites that may be of interest to our readers. (1) The Sexual Medicine Society of North America provides much useful sexual health-related information that you may find helpful. It is sanctioned by the American Urological Association, and its main purpose is the promotion of sexual health education. You may visit its newly-launched web site at sexhealthmatters.org. There are videos where leaders in the field talk about testosterone, erectile dysfunction, Peyronie's disease, and like topics. (2) Gerald Chodak, MD, a well-known urologist, author, and educator, has launched a website offering topical videos regarding prostate cancer. Dr. Chodak is a regular contributor to the US TOO "Hot Sheet" where he often comments on new research, putting it in perspective for the prostate cancer patient. Visit Dr. Chodak's new website at www.ProstateVideos.com.

♦ FEBRUARY SPEAKER'S REMARKS ♦

Our February program featured Dr. Robert C. Dean, Director of Andrology at WRNMMC. His topic was "Medical and Surgical Treatments for Sexual Dysfunction." A summary of his presentation begins on page 7.

♦ MEETING SCHEDULE FOR MAY 31, 2012 ♦

Our speaker for Thursday, May 31, 2012, is Dr. George K. Philips, an internationally recognized genitourinary cancer expert at the Lombardi Comprehensive Cancer Center, Georgetown University Hospital. Dr. Philips' main interest is in clinical trials with special interest in prostate cancer screening, prevention, and active surveillance. **His topic is "The Role of Active Surveillance in Dealing with Prostate Cancer."** He will also include remarks about dealing with advanced cancer. Come join us at 7:00 PM, Thursday, May 31, 2012. Your family members and friends are always welcome. **See the back page for important information about this meeting.**

So How Does Robotic Prostatectomy Compare? **Robot-assisted laparoscopic radical prostatectomy (RALP) is heavily marketed and has become the leading form of the surgical prostatectomy. A recent study looked at 400 original research articles and found that RALP has at least as good outcomes as the other methods - open radical prostatectomy (ORP) and laparoscopic radical prostatectomy (LRP). However, the study did not include two important measures — urinary continence and sexual potency — because the outcomes data were limited to events occurring 30 days after surgery. No study to date has looked at all 3 approaches together, say the authors. They also concluded that there is no good evidence of an overall benefit for one modality over another, and it is uncertain whether minimally invasive surgery, especially robotics, justifies its increased costs and training requirements.**

The primary outcomes were positive surgical margin (PSM) rates and total complication rates. The rates for cancers beyond the prostate were not significantly different after statistical adjustment. Total complication rates were significantly higher for ORP than for RALP and for LRP than for RALP.

The study also looked at secondary outcomes, including blood loss, transfusions, conversions, length of hospital stay, and specific individual complications. There was less blood loss, fewer transfusions, and shorter hospital stays with LRP and RALP than with ORP. Total perioperative complication rates were higher for ORP and LRP than for RALP. Total intraoperative complication rates were low for all modalities, but lowest for RALP. Rates for readmission, reoperation, deep vein thrombosis, pneumonia, hematoma, lymphocele, anastomotic leak, fistula, wound infection, and nerve, urethral, and rectal injury were significantly different between groups, generally favoring RALP, say the researchers.

One researcher said that on the basis of these findings, he cannot recommend one surgical approach over another, in part, because the technique and experience of the surgeon might be more important than the approach alone.

The study is innovative in its attempt to unpack the outcomes data, in a systematic way, but it has a number of limitations, including lack of randomized controlled trials, uncertainty about the use of margin status as an indicator of oncologic control, and the inability to perform cost comparisons.

An earlier study, also published in *European Urology* (2008;54:785-793), has suggested that patient satisfaction is a wild card in terms of outcomes with the removal of the prostate. That study found that patients who underwent RALP were more likely to be regretful and dissatisfied than patients who underwent radical retropubic prostatectomy because of higher expectation of an innovative procedure. The researchers suggest that urologists carefully portray the risks and benefits of new technologies during preoperative counseling to minimize regret and maximize satisfaction. (Source: *European Urol*. published online February 24, 2012, via Medscape, May 2, 2012)

PSA Testing in Older Men Continues. The U.S. Preventive Services Task Force had recommended against testing for prostate cancer in men aged 75 and older, but new research finds that almost 44 percent of these men are still being screened.

Before the 2008 guidelines were set, about 43 percent of men in this age group opted for prostate-specific antigen (PSA) tests, but the task force found that testing had no effect on longevity and could result in overtreatment with adverse consequences. Meanwhile, the task force drafted a *new* set of guidelines last October that are even more critical of PSA testing, suggesting it may not have any value for men of any age.

A recent review revealed that patients and providers did not adjust their screening behavior following the last major United States

Preventive Services Task Force recommendation. Many physicians and patients continue to have confidence in PSA screening to prevent death from prostate cancer. The medical community must refine the use of the PSA screening test to minimize overdiagnosis and overtreatment of prostate cancer without losing ground on the progress we have made against the disease.

The researchers found that the number of older men receiving PSA tests had actually increased to 43.9 percent by 2010. That's more screening than in men in their 40s and 50s (12.5 percent and 33.2 percent, respectively) who are the ones most likely to benefit from early diagnosis and treatment. Because patient data is self-reported, the results likely underestimate the actual number of men getting PSA screening, the researchers noted.

Dr. Anthony D'Amico, chief of radiation oncology at Brigham and Women's Hospital in Boston, doesn't think that age is a good indicator of when PSA screening is appropriate He thinks that the physician should look at an individual's life expectancy, and if it's more than 10 years, that person should be screened. Moreover, Dr. D'Amico said the reason the rate of screening has remained the same is because of confusion. Doctors and patients don't know what to think, because there is evidence that PSA works in one study and that it doesn't in another, so rather than change they continue to screen as they have been doing all along. (Source: HealthDay News, April 24, 2012)

Active Surveillance. An independent panel of experts has endorsed delaying treatment, at least for a time, for many men who are diagnosed with forms of prostate cancer that likely pose no risk to long-term health. Forgoing immediate treatment with surgery or radiation, both of which can have serious side effects, and instead actively monitoring the disease is a "viable option" for many men diagnosed with low-risk prostate cancer, the panel concluded.

The large majority of men diagnosed each year with low-risk prostate cancer opt for immediate treatment with surgery or radiation. Both treatments can produce side effects that can seriously impair a man's quality of life, including erectile dysfunction and incontinence. Even so, in the United States only about 10 percent of men diagnosed with low-risk prostate cancer choose some form of observation.

The prognosis for men diagnosed with low-risk prostate cancer is so good, the panel concluded, that "strong consideration should be given to removing the anxiety-provoking term 'cancer' for this condition." Avoiding the term in these cases could encourage fewer men to pursue immediate treatment, several panel members suggested.

NIH convened the conference to assess data supporting active surveillance, the observation-first approach most commonly used in the United States for selected men with low-risk prostate cancer. Due to widespread screening with the prostate-specific antigen (PSA) test, low-risk prostate cancers now account for the majority of diagnosed cases. Active surveillance involves monitoring the cancer with PSA testing, digital rectal examination, and biopsies at routine intervals and initiating treatment with curative intent only if and when these monitoring techniques indicate that the disease may be progressing.

Based on studies showing similar survival outcomes compared with immediate treatment, active surveillance has been recommended for men with low-risk or very low-risk prostate cancer, depending on their life expectancy. Categorizations such as low-risk disease are based on the PSA score at diagnosis, the grade of the tumor's aggressiveness (Gleason score), and to what extent tumor cells are found in needle biopsy samples taken from the prostate.

"We estimate that more than 100,000 men diagnosed with prostate cancer each year in the United States would be candidates for active monitoring rather than immediate treatment," said the panel chair, Dr. Patricia Ganz of UCLA's Jonsson Comprehensive Cancer Center.

A number of important questions remain about active monitoring approaches. It's still unclear, for example, how best to carry out these observation-first protocols, including the frequency of

biopsies, which carry their own risks. Effective approaches are still needed to improve the process by which patients interact with physicians to reach treatment decisions, panel members said, including informed discussions about options such as active surveillance.

Although some men will never require treatment, Dr. Carroll stressed that the aim of active surveillance is to delay treatment—and its potential side effects—as long as possible. "It's not treatment versus no treatment," he said. "That's important."

A modest proportion of men in the large active surveillance programs drop out, choosing to have surgery or radiation despite no evidence that their cancer is progressing. To understand why men make these decisions, research is needed on the role of factors such as anxiety and family pressures. Future studies should compare the effectiveness of different active surveillance protocols, the panel recommended.

Several studies suggest that physician recommendation is perhaps the strongest factor driving men's treatment decisions. But a patient's role and his reaction to a cancer diagnosis, shouldn't be discounted, said panel member Dr. Barry Kogan, chair of the Division of Urology at Albany Medical College.

"The word 'cancer' tends to set off an emotional response in patients," Dr. Kogan said, "that encourages them to pursue what they perceive to be the most effective treatment regimen." (Source: NCI Cancer Bulletin, Volume 8, Number 24, dated December 12, 2011)

Ultrasound "Male Lumpectomy" for Prostate Cancer. An experimental treatment targets prostate tumors while leaving healthy prostate tissue intact. It has been called "male lumpectomy," because, like less-invasive forms of breast cancer surgery, it removes tumors without removing the entire organ.

The treatment, under development by Ahmed, et al., at London's University College Hospital, uses high-intensity focused ultrasound (HIFU) to target small patches of cancer cells. This "focal therapy" is intended to reduce the serious side effects common with standard treatments for prostate cancer In standard therapy, the whole prostate is treated with radiation or removed surgically. Both types of treatment can lead to significant problems such as urinary incontinence, erectile dysfunction, and bowel toxicity.

The researchers treated 41 men with focal ultrasound therapy. The men had early prostate cancer: no more than stage II cancer, PSA levels no higher than 15, and a Gleason tumor score no higher than 7. MRI imaging identified small areas of cancer cells to be treated with ultrasonic waves, delivered by a probe to generate heat in the cells to be destroyed.

After 12 months, none of the men in the trial had urinary incontinence and almost nine out of 10 men (89%) could attain satisfactory erections. The researchers also found that 95% of the men who underwent biopsies were cancer-free after a year, although four had needed re-treatment with the focal therapy. The researchers say that this focal therapy leads to a low rate of side effects and an early freedom from clinically significant prostate cancer.

The researchers note that their pilot study, while encouraging, does not yet prove that focal ultrasound therapy is ready for prime time. Larger studies are now needed to confirm their initial findings. Other commentators similarly caution against enthusiasm until more work is done. (Source: WebMD, April 17, 2012)

Supplements and Cancer Prevention. Government regulators need to provide clear guidance to the public about dietary supplements and cancer risk. Evidence from animal, in vitro, and observational studies has shown that taking certain dietary supplements may lower cancer risk. However, the small number of randomized controlled studies, the gold standard in evidence-based medicine, has not confirmed this, and some studies have actually shown that supplements may increase cancer risk. Still, the supplement industry is booming, with estimated annual sales at $30 billion in the U.S.

To examine the potential role of dietary supplements and cancer risk, Martinez, et al., University of California, San Diego, looked at

observational studies of several supplements, including anti-oxidants, folic acid, vitamin D, and calcium, and several observational studies that found diets high in fruits and vegetables associated with lower risk of certain cancers, including respiratory and gastrointestinal. With respect to antioxidant supplements, the authors found that: “The importance of oxidative stress for carcinogenesis does not establish that the administration of supplemental antioxidants will protect against the carcinogenesis that oxidative stress may induce.” Furthermore, they said, “Supplementation by exogenous antioxidants may well be a two-edged sword; these compounds could, in vivo, serve as pro-oxidants or interfere with any of a number of protective processes such as apoptosis induction.” Indeed, several antioxidant trials the researchers examined reported increased cancer risks with supplementation. They looked at trials with supplements using Folic Acid, vitamin D and calcium, among other compounds.

The researchers caution against taking dietary supplements for cancer prevention, adding that many expert committees and organizations have concluded that nutritional supplements have little or no benefit in cancer prevention. They say that more randomized control trials—spanning many years instead of just a few—are needed to verify the effect of nutritional supplementation in cancer risk.

Meanwhile, people continue to take supplements, spurred by manufacturers’ suggestions that supplements are healthy at best and harmless at worst. Furthermore, believers in supplements assume that they are well-regulated, the authors write. The researchers say that these beliefs underscore the need for efforts by scientists and government officials to encourage the public to make prudent decisions based on sound evidence with respect to use of dietary supplements for cancer prevention.

NEW DRUG FOR ERECTILE DYSFUNCTION

Avanafil, marketed as Stendra by Vivus, is a new drug to treat erectile dysfunction (ED) approved on April 27, 2012, by the US Food and Drug Administration (FDA). It is the fifth FDA-approved branded oral drug for ED. The others are Cialis, Levitra, Staxyn, and Viagra.

Like the others, avanafil belongs to the drug class called phosphodiesterase type 5 (PDE5) inhibitors, which increase blood flow to the penis. As a PDE5 inhibitor, avanafil should not be prescribed for men who also take nitrates, commonly used to treat angina, because the drug combination can cause blood pressure to plummet, the FDA said in a recent announcement. In addition, the agency cautions that PDE5 inhibitors may on rare occasions trigger color vision changes, a sudden loss of vision or hearing, and erections lasting more 4 hours or more. Avanafil is to be taken on as-needed basis 30 minutes before sexual activity. Avanafil is reportedly faster working and has fewer side effects than its competitors.

The FDA said that three clinical trials involving 1,267 patients established the safety and effectiveness of the new drug. The patients were randomly assigned to take various doses of avanafil or a placebo for up to 12 weeks. Patients receiving avanafil reported significant gains in erectile function, vaginal penetration, and successful intercourse. The most common adverse events, reported in more than 2% of patients in the clinical trial, were headache, flushing in the face and other areas, nasal congestion, symptoms of nasopharyngitis, and back pain.

More information about the FDA's approval of avanafil is on the agency’s web site.

"Medical and Surgical Treatments for Sexual Dysfunction"
by
Dr. Robert C. Dean

(Summary of a presentation to the WRNMMC Prostate Cancer Support Group on February 2, 2012)

INTRODUCTION

I am pleased to be back with you again. I am also very happy to be at this new campus because I attended medical school here in the 1980s and then worked at this hospital. During my last visit with you two years ago we talked about sexual health and tonight I want to give you updates about developments in the field. I intend to move relatively quickly through my slides because I think you gain more from the questions and answer period, but the slides help drive home some to the central elements of my presentation. So let's get started.

ANDROLOGY

Andrology is a subset of urology that focuses on the study of sexual health in the human male. Tonight we primarily will be discussing erectile dysfunction (ED). The conventional definition of ED is the inability to generate and sustain an erection adequate for penetration during sexual intercourse. In my practice, I see men in all age groups and many of them think that they are the "Lone Ranger" in this regard, not realizing the prevalence of erectile dysfunction in the male population. As members of this prostate cancer support group, you are generally familiar with ED, its causes and treatments. But when a thirty-year-old man comes to see me, he often thinks his is a unique condition. But it's not! Many men in their thirties and forties can experience ED as often as 20-40 percent of the time. So ED is a significantly large problem in medical science, but we are making some positive strides that I want to discuss with you tonight.

ERECTILE DYSFUNCTION

Yes, ED is very common. Ninety percent of the time it is due to a physical reason, such as blood flow, nerve issues, trauma injuries, and the like. The common wisdom used to be that the major problem was more mental or psychological in nature - sexual performance was inhibited by a mental block, so to speak. We don't think that way anymore. If a man is unable to perform, it is usually due to a physical reason. The primary organic causes of ED are vascular, neurogenic, hormonal, penile injury, disease-related, and medications-related. More specifically, the organic causes of ED in terms of their prevalence are: vascular (40%); diabetes (30%); medications (15%); pelvic surgery, radiation, or trauma (6%); neurological causes (5%); endocrine problems (3%); other (1%). Let me emphasize that the principal organic causes of ED are related to vascular disease and diabetes. The related risk factors for ED are well-known: hypertension, hyperlipidemia, smoking, hypogonadism, alcohol abuse, drug abuse, anemia, Peyronie's disease, depression, and obesity.

We must not overlook the impact of medications on ED. When I see a patient, one of the first things I do is review his medications to evaluate their relationship, if any, to ED. Also, hormonal imbalance is getting a lot of press these days. If you asked me about four or five years ago whether I would prescribe testosterone for a man with a history of prostate cancer, I would emphatically say no, that it can't be done! To do so would fly in the face of everything I had been

taught. But that is no longer true. Under certain circumstances, a man with ED, low testosterone, and prostate cancer could be a candidate for testosterone supplementation. This is a significant new development.

(Dr. Dean then showed a series of slides depicting the anatomical arousal process.)

Yes, indeed, sex does start in the brain! There are at least four centers in the brain that can trigger sexual response. The response mechanism travels down the spinal cord to the pelvis, then proceeds to the penis. The nerves that lead into the pelvis and then to the penis are absolutely essential for good sexual function. As you can see, these nerves lay right against the prostate gland and they are also very close to the bladder and the rectum, so any pelvic surgery, pelvic radiation, or pelvic injury, places the man at risk for ED. Then, of course, adequate blood flow is a major factor in achieving a good erection. The arteries that are in the center of the penis are called cavernosal arteries. During arousal they dilate to more than twice their size when a man has an erection and so the blood vessels have to be very healthy to be elastic. Erections are a complex event requiring an intact arterial and venous system, normal enervation, normal hormonal factors, and functioning erectile tissue. Abnormalities in any or all of these will lead to ED. We are finding out now that if a man has trouble with erections, perhaps in his 40s or 50s, he is likely at risk for heart disease, too, because if he is having a vascular problem affecting his penis, he likely has a vascular problem affecting his heart. One study involving 15,000 men found that men who had sexual function problems often had a heart attack within seven years. So when a man presents for ED, we must also look at other aspects of his health, not just the sexual functioning condition.

What are the barriers to the identification of erectile dysfunction or any aspect of sexual health for that matter? Sometimes it is the patient's discomfort or the physician's discomfort in talking about the sexual aspect of male health. Cultural beliefs and religious attitudes also play a role in the reticence to frankly discuss sexual matters. Furthermore, most doctors have had little, if any, specific training in that area. It used to be a big issue about who would bring up the topic of sexual health. The patient hoped the doctor would do so, and the doctor wanted the patient to raise the subject. So no one would talk about it, and the patients suffered in silence, if you will. That all went away with the advent of Viagra! Patients and physicians alike began to talk more freely about sexual health. Viagra also spurred interest in therapies for ED that we already had. Why? When men with ED problems learned about Viagra, they were more than willing to try it, and when it did not work for them, they then became interested in trying other therapies that were already available. Let me tell you now that if you see an andrologist, you had better be prepared to discuss sex!

<u>Viagra, Cialis, and Levitra</u>

Let's talk about the popular oral treatments for a moment. They have been on the market now for over ten years, so there is no mystery about them as you can readily observe by watching by the frequent advertising on national TV! By the way, Viagra is the medication carried on the formularies of military pharmacies, but I am able to prescribe Levitra and Cialis when medically indicated. I like Viagra. It works rather quickly, within 30 minutes to an hour, and it remains in the patient's system for about 4 to 6 hours. So it is "on demand," i.e., it is taken when needed, and it need not be taken daily. Here is one older study about Levitra. About 400 men took part in the study that sought to determine the relative effectiveness of Levitra only 12 weeks after the men underwent radical prostatectomies. One-third received a placebo and two-thirds got Levitra in varying doses. Among the men who took the placebo only ten percent were able to obtain an erection adequate to achieve penetration. The success rate for the men on Levitra was about 35

percent. I want to emphasize that the study was done only 12 weeks after surgery, so this was a very significant outcome.

The question often arises regarding the ED rates associated with the primary therapies, surgery and radiation. Most of the reported outcomes involve one large practice or hospital center and they are difficult to compare due to differing definitions of ED and other analytical variations. Suffice it to say that there have been no large, multi-center studies to date regarding the comparative efficacy of the primary therapies in reducing the risk of ED

Managing Oral Treatment Failure

Let's say you had one of the primary therapies for prostate cancer, or are in watchful waiting, and Viagra (or Cialis or Levitra) is not helping you to cope with ED. What other therapies are available?

Vacuum Erection Devices. Vacuum erection devices have been on the market for a long time, and there have been modifications and improvements over the years. It is basically a simple cylinder placed over the penis and pressed against the body to create a seal. A battery-operated pump or a hand-held pump is used to create suction to draw blood into the penis. A special band is placed at the base of the penis to trap the blood in place. This is a mechanical way to obtain an erection. It is very safe and there are no medicinal side effects to be concerned about. One study had men use the vacuum pump soon after surgery to see if its early use would preserve penile length, and it did so in a large segment of the men study. By "exercising" the penis in this manner, so to speak, the penis maintained its length compared to the cohort that did not use the device. So that is vacuum pump, it is readily available, and it does work well for some men.

PENILE INJECTION THERAPY

Intracavernosal Injection. Many men cringe when I show these pictures of self-injection into the penis! The drug alprostadil is injected into the side of the penis using a very small needle in much the same manner that a diabetic self-injects insulin, except that the injection site is different! The medication works directly on the blood vessels, so it is a very beneficial for men whose ED is due to nerve damage associated with surgery, radiation or trauma. This works for them because the nerves don't have to be functional. A successful erection is produced within ten minutes in a large percentage of the men who have used it. Is there a drawback? Well, for one thing, it's that self-injection into the penis! The patient has to overcome that inhibition, but when men do, they are usually pleased with this therapy because it is a natural erection. There is good blood flow into the penis, the penis feels warm, there is good sensation, and the erection lasts for half-hour to an hour with the correct dosage.

Second-line Therapy. MUSE (Medicated Urethral System for Erection) became available in the mid-1990s before the advent of Viagra. MUSE is a transurethral system that delivers alprostadil to the penis without requiring a needle. A small applicator is inserted into the urethra for about 1.0 to 1.5 inches to deliver a small pellet the size of a grain of rice. Body temperature melts the pellet to diffuse the medication into the penis, causing an erection. There is a drawback in terms of some discomfort and overall effectiveness. The attrition rate among MUSE users is high.

About 40 % of the men who employ penile injection therapy remain on the medication for over one year - a reasonably high rate. By comparison, about 51% of men who rely on oral medications (Viagra, Levitra, Cialis) persist in that therapy. The penile prosthesis is the greater suc-

cess story with about 93 percent satisfaction rate. A study done about 5 years ago revealed that about 96 percent of the spouses were pleased that their husbands had the penile prosthesis surgery.

PENILE PROSTHESIS IMPLANTATION. (Dr. Dean showed a slides illustrating the several types)

As I just noted, the penile prosthesis has high acceptance among its users. These devices have been on the market since the 1970s. The first one done successfully was here in the United States. It was done by a Dr. Small and the term "the Small prosthesis" became popular. The in-house joke was that while men sought the penile prosthesis, they didn't want the "Small" one! So the penile prosthesis has been a success story, and there have been regular technical improvements over the years, making them even more effective.

There are several different types, e.g., malleable, semi-rigid, mechanical rod, inflatable two-piece, and inflatable three-piece. More than ninety percent of the men in the US who get a penile prosthesis choose the inflatable style. This is what the malleable style looks like. As you can see, there are bendable rods. The surgery for this type of device takes about 45 minutes. After an overnight stay, the patient goes home the next day. The bendable rods keep your penis rigid, but you can change the angle. You can angle it down when you are not having sex, and you just angle it up to engage in sex. The newest model is called the Spectra. The older models tended to remain angled up slightly, and men them found this to be awkward. The new model stays down when it is supposed to do so. This is an example of the improvements being made in these devices. But again, the malleable type is not the most common one that we do.

These are the inflatable styles. The cylinders are placed in the penis, the tiny pump is in the scrotum and these little reservoirs hold fluid. Basically the device transfers the fluid from the reservoir to the cylinders that are in the penis, causing the erection. The erection is maintained for as long as you wish. Then when you don't want it, there is a small valve at the base of the pump to transfer the fluid back to the reservoir. Then the penis is flaccid again. No one would know you had this device because it is entirely within the body so you look perfectly normal. The scars are actually on the scrotum and once they heal, no one can really see them.

One of the biggest advances recently has been the redesign of the reservoir. Earlier versions employed a design that sometimes complicated placement of the reservoir especially in men who had a robotic prostatectomy. So we had to make more incisions to create the space for the older model reservoir. Two manufacturers (American Medical Systems and Coloplast) redesigned their products to make placement of the reservoir much easier and safer. This is a very important improvement in the evolution of the penile prosthesis.

The penile prosthesis is ideal for men who have had other ED treatments that failed them or were otherwise unsatisfactory. It is a proven product, having been on the market for over thirty years. Nationwide, more than 42,000 penile prosthesis are implanted annually. And as already noted, it has the highest patient satisfaction and partner satisfaction rate. If a man is satisfied with another ED therapy, e.g., vacuum pumps, injections, and the like, he should stick with it. But it surgery is preferred, or indicated, then the penile prosthesis is a viable option.

RECUPERATIVE THERAPY

When can I expect my erections back? This is the question I get all the time, especially after surgery. We know it can take three years to regain full erection, but nowadays we don't wait

those three years. We start therapy very early after therapy. This more aggressive approach began about 2003 or 2004. We start men right away post-therapy on Viagra, Levitra, or injection therapy, and do not wait for their recovery to occur. This helps them get their erections back sooner, and when their erections do come back, the penis is healthier. Think of it this way - if you had shoulder surgery and it was placed in a sling for three years, imagine the condition of your shoulder when the sling was removed. It would be atrophied and tight - it just wouldn't work very well. The same thing is true for the penis. If we did not commence therapy very soon, penis could actually get shorter and less responsive once the nerves or blood vessels start to recover. So early recuperative therapy is one of the newest advances in combating post-therapy ED. Now when we do multidisciplinary counseling for newly diagnosed men here at Walter Reed, I make them aware of this important development and offer my services to support them in their sexual health. I encourage them to see me soon after their primary therapy for prostate cancer. This effort is patient-driven because the patient must actively seek this post-therapy support.

PEYRONIE'S DISEASE

Now I wanted to touch briefly on Peyronie's disease. It is curvature of the penis that can be caused by a scarring or a plaque on the penis. We see it most often in men who have prostate surgery or radiation and we attribute it to poor blood flow into the penis with erections, causing the tissues of the penis to scar more in one area than another, resulting in curvature of the penis. We are studying this condition more than we have in the past. There is still some debate about the basic cause of Peyronie's disease. Some suggest that it is induced by the Foley catheter; some think it is simply the primary therapy itself, be it surgery or radiation; others opine that it is due to erectile dysfunction itself. So an authoritative explanation of Peyronie's disease is still awaited.

SOME FINAL COMMENTS

About two years ago, the John Adams HBO series, based on the book by David McCullough, was a special event for me. I had read the book, but what fascinated me about the HBO series was that they showed John Adams and Abigail Adams as a sexual couple, i.e., the couple were still very sexually active into their later years (in these pictures they don't appear to be what we call "sexy" today!) The point here is that sustained sexual interest and activity can continue for decades beyond the contemporary stereotype; it need not stop at some arbitrary age just because you are over 60 and your children (or grandchildren) can't believe you are "still doing it!"

And now for my last item. The Sexual Medicine Society of North America provides much useful sexual health-related information that you may find helpful. (I am a member of the board of directors.) It is a worthy organization, sanctioned by the American Urological Association, whose main purpose is the promotion of sexual-health education. You may wish to visit its newly-launched web site at sexhealthmatters.org. There are videos where leaders in the field talk about testosterone, erectile dysfunction, Peyronie's disease, and like topics. So if later you have questions about sexual health, this would be a good source for you. The Sexual Medicine Society of North America has related societies in Europe and Asia operating as the International Society for Sexual Medicine.

QUESTIONS AND ANSWERS

Question: I have used Levitra on occasion. I am not sure it is working as well as it should. Can you talk about some of the side effects of it, and Cialis and Viagra.

Answer: About 90% of the men who take these medications have no side effects. Among the other 10%, the biggest complaint is headache. Some men report a flush of warmth in the face; others experience blurred vision, congestion, a runny nose, and nausea. There have been some scares over the years. Initially there were some deaths associated with Viagra among men with heart disease who took nitroglycerine medications concurrent with Viagra. Once heart disease is treated and nitroglycerine medications are no longer required, then Viagra is perfectly safe. Then some men worried unrealistically that the physical activity required for sex could precipitate a heart attack - not to worry! Cialis has a somewhat different side-effects profile. Cialis takes longer to work. It takes about two hours to become effective, but once it is in your system it is there for 36 hours which sometimes results in muscle ache. Interestingly, Cialis the only drug with FDA approval for daily use instead of on demand. Recently it was reported that Cialis may help men whose enlarged prostates are causing problems.

Question: How soon after surgery should one begin to deal with ED?

Answer: Right away. As I mentioned in my remarks, there is evidence that the early post-therapy resort to medications that stimulate the erection process can help speed the recovery of potency and have other beneficial aspects.

Question: Can you comment more about the return of potency after primary therapy?

Answer: Men who had strong erections prior to therapy are those whose potency is more likely to return sooner. If you had less than satisfactory performance before primary therapy, your subsequent erections are not going to be improved after therapy. On average, in the first year after therapy, about 45 percent of men will have erectile recovery. In the next year, another ten percent will join that group, and in the next year another 7-8 percent will join that group. For some men, it will sometimes take up to 3 years, but by then, approximately 60 percent of the men will have a return to potency, the majority of them within the first year. I hasten to add that the return of potency is likely to be at a level less than it was prior to primary therapy.

Question: How "permanent" is the penile prosthesis?

Answer: The penile prosthesis surgery is permanent. That is one of its drawbacks. If you choose to have a penile prosthesis, that is the only way thereafter that you will ever get an erection because I am placing the cylinders in your penis where the natural blood flow would normally go, so in effect, I am replacing the blood flow with the cylinders. If I removed the penile prosthesis, there still wouldn't be any blood flow. So we only do a penile prosthesis when we know that the man is aware of all the implications and still feels his ED is such that he wants the penile prosthesis with all its advantages and its attendant potential disadvantages. Of course, in the event of a prosthetic failure, the failed device can be replaced with a new prosthesis.

Question: What is the likelihood of ED and Peyronie's disease after surgery or radiation?

Answer: If you queried men at the three-year mark after they had primary therapy, 60 percent would be complaining about erectile dysfunction. Not that they all were impotent, though some would be; no, most would be complaining that their erections were not the way they were before their therapy. Sixty percent is the real number before Viagra because Viagra changed the sexual environment. As for Peyronie's disease, the curvature problem, we know that happens in about 6-10% of men in their fifth or sixth decade of life. We are trying to figure out the exact cause. We do know that the greatest incidence appears to be among men who underwent radi-

cal prostatectomy. The studies to date are not perfect because they have been observational in nature.

Question: Is the penis like a muscle that has to be used to maintain its performance?

Answer: Yes, and this is true of health in general. If you exercise a muscle set regularly, it will be strengthened. But lay off for a year and watch what happens to it! The same process applies to the unused penis which is composed of smooth muscles, elastic fibers, collagen, blood vessels and nerves. As a rule, use it repetitively and it stays healthy. Now we are all going to age; you can run a marathon every week for the rest of your life, but eventually, your time to finish will increase. The same aging process applies to the penis. Eventually it will not respond as well as it once did and it will take longer to recover in order to perform again. The strength of the erection also fades as you get older. Use it or lose it applies.

♦ DIET, EXERCISE, AND WEIGHT CONTROL GUIDELINES FOR CANCER SURVIVORS ♦

New guidelines from the American Cancer Society recommend that people living with cancer maintain a healthy weight, get enough exercise, and eat a healthy diet. Increasingly, scientific evidence shows that healthy nutrition and physical activity behavior after a diagnosis can lower the chances of the cancer coming back, and can improve the chances of disease-free survival. The updated Nutrition and Physical Activity Guidelines for Cancer Survivors was recently published by the American Cancer Society. A spokesperson said, " While we've published previous reports outlining the evidence on the impact of nutrition and physical activity on cancer recurrence and survival, this is the first time the evidence has been strong enough to release formal guidelines for survivorship, as we've done for cancer prevention. Living a physically active lifestyle and eating a healthy diet should absolutely be top of mind for anyone who's been diagnosed with cancer. " Among the recommendations:

1. Achieve and maintain a healthy weight.

- Avoid weight gain during cancer treatment, whether you are at a healthy weight or overweight.
- Weight loss after recovery from treatment may benefit survivors who are overweight or obese.

2. Be physically active.

- Studies show that exercise is safe during cancer treatment, and can improve many aspects of health, including muscle strength, balance, fatigue, and depression.
- Physical activity after diagnosis is linked to living longer and a reduced risk of the cancer returning among people living with cancer, including breast, colorectal, prostate, and ovarian cancer.

3. Eat a healthy diet, with an emphasis on fruits, vegetables, and whole grains.

- The most health benefits are associated with a diet high in fruits, vegetables, whole grains, poultry, and fish, and low in refined grains, red meat and processed meat (such as hot dogs), desserts, high-fat dairy products and French fries. Most of the studies about cancer and diet have focused on breast cancer.
- Studies show that taking vitamins, herbs and other nutritional supplements often does not help cancer patients live longer, and may even shorten life. Before taking any supplement, discuss it with your health care provider.

♦ WRAMC US TOO COUNSELORS ♦

(As of May 31, 2012)

(THESE PERSONS ARE WILLING TO SHARE THEIR EXPERIENCES WITH YOU. FEEL FREE TO CALL THEM.)

SURGERY

Tom Assenmacher	Kinsvale, VA	(804) 472-3853	
Jack Beaver	Falls Church, VA	(703) 533-0274	
Gil Cohen	Baltimore, MD	(410) 367-9141	
Richard Dorwaldt	San Antonio, TX	(210) 310-3250	(Robotic Surgery)
Michael Gelb	Hyattsville, MD	(240) 475-2825	(Robotic Surgery)
Robert Gerard	Carlisle, PA	(717) 243-3331	
Ray Glass	Rockville, MD	(301) 460-4208	
Monroe Hatch	Clifton, VA	(703) 323-1038	
Tom Hansen	Bellevue, WA	(425) 883-4808	(Robotic Surgery)
Bill Johnston	Berryville, VA	(540) 955-4169	
Dennis Kern	San Francisco, CA	(415) 876-0524	
Steve Laabs	Fayetteville, PA	(717) 352-8028	(Laparoscopic Surgery)
Don McFadyen	Pinehurst, NC	(910) 235-4633	
Sergio Nino	Dale City, VA	(703) 590-7452	
George Savitske	Alexandria, VA	(703) 671-5469	
Artie Shelton, MD	Olney, MD	(301) 523-4312	
Jay Tisserand	Carlisle, PA	(717) 243-3950	
Don Williford	Laurel, MD	(301) 317-6212	

PROSTATE CANCER AND SEXUAL FUNCTION

James Padgett	Silver Spring, MD	(301) 622-0869	

RADIATION

Leroy Beimel	Glen Burnie, MD	(410) 761-4476	(External Beam Radiation)
Bob Bubel	Grand Junction, CO	(970) 263-4974	(Proton Beam Radiation)
Harvey Kramer	Silver Spring, MD	(301) 585-8080	(Brachytherapy)
Bill Melton	Rockville, MD	(301) 460-4677	(External Beam Radiation)
Joseph Rosenberg	Kensington, MD	(301) 495-9821	(Brachytherapy)
Oliver E. Vroom	Crofton, MD	(410) 721-2728	(Proton Beam Radiation)
John Waller	Yorktown, VA	(757) 865-8732	(Brachytherapy)
Barry Walrath	McLean, VA	(703) 442-9577	(Brachytherapy)

INCONTINENCE

Ray Walsh	Annandale, VA	(703) 425-1474	

HORMONAL

"Mac" Showers	Arlington, VA	(703) 524-4857	

WATCHFUL WAITING

Tom Baxter	Haymarket, VA	(703) 753-8583	

SPOUSE SUPPORT

Kay Gottesman	North Bethesda, MD	(301) 530-5504	

OTHER THERAPIES/MULTIPLE THERAPIES

Howard Bubel	Fairfax, VA	(703) 280-5765	(Cryosurgery, Hormonal, Sexual Function)
Arthur E. Clough	Kerryville, TX	(210) 896-8826	(Surgery and Radiation)
Pete Collins	Mechanicsburg, PA	(717) 766-6464	(Surgery, Radiation, Hormonal)
S.L. Guille	Sumerduck, VA	(540) 439-8066	(Surgery, Radiation, Hormonal)
Richard Leber	Chapel Hill, NC	(919) 942-3181	(Surgery, Radiation, Hormonal)
Charles Preble	Annandale, VA	(703) 560-8852	(Cryosurgery, Hormonal, Intermittent Hormonal)
Emerson Price	Absecon, NJ	(609) 652-7315	(Hormonal, Radiation, Cryosurgery)
S.L. Ross	Alexandria, VA	(703) 360-3310	(Brachytherapy, Radiation, Hormonal)
Jon Schmeiser	Aiea, HI	(571)243-8198	(Chemotherapy)
Ken Simmons	Alexandria, VA	(703) 823-9378	(Radiation and Hormonal)
Bill Stierman	Vienna, VA	(703) 573-0705	(Surgery and 2nd Line Hormonal-Ketoconazole)
Ray Walsh	Annandale, VA	(703) 425-1474	(Surgery and Hormonal)

♦ MEETING ANNOUNCEMENT ♦

THURSDAY, MAY 31, 2012
7 PM

RIVER CONFERENCE ROOM
AMERICA BUILDING (3D FLOOR)
WALTER REED NATIONAL MILITARY MEDICAL CENTER

♦ SPEAKER ♦

GEORGE K. PHILIPS MD, MPH, FACS

Associate Professor of Medicine, Hematology and Oncology

Georgetown Comprehensive Cancer Center, Georgetown University Hospital

♦ TOPIC ♦

"The Role of Active Surveillance in the Treatment of Prostate Cancer"

We meet at the River Conference Room (3d floor) at the Walter Reed National Military Medical Center located at 8901 Wisconsin Avenue, Bethesda, MD 20889. This is the same location as our monthly meetings.

Gate/Parking: If you enter the base through South Gate (Gate 2) off Rockville Pike/Wisconsin Ave, take the first right (Palmer Road South). On your left you will see the Emergency Room. Continue to follow signs to the America Building and the America parking garage.

Security: A military ID is required to get on base. Persons without a military-related ID card who are attending the meeting are required to register in advance in order to gain entry. To register, contact Jane Hudak at 301-319-2918 or jane.hudak@med.navy.mil no later than Monday, October 31 so she can arrange for entry. Have a photo ID card ready.