2nd Annual Prostate Cancer Forum
An Educational Initiative

Restoring Quality of Life: Managing Side Effects/Pain Control

Isaac Powell, MD

I. Urinary Incontinence

Incontinence is the objective demonstration of involuntary loss of urine consequent to bladder and/or sphincter dysfunction. It is not a life-threatening condition, however, a man's quality of life can be greatly affected. Incontinence is not a disease, but it does make every-day activities challenging. For patients, it can lead to embarrassment, discomfort, isolation, anger and depression, but incontinence can be treated.

II. Causes/Kinds of Incontinence

Causes of incontinence include a radical prostatectomy, TURP, pelvic surgery, and anatomical or neurological birth defects. Stress and urge incontinence are found as a result of radical prostatectomy. Stress incontinence occurs when one leaks urine doing a physical activity, and urge incontinence occurs when one has an overwhelming need to urinate and is unable to hold the urine long enough to get to the toilet. It occurs when the bladder is unstable and the patient can't control urination.

III. Treatment

Nearly every man can be successfully treated for incontinence following a radical prostatectomy. Medical and surgical treatments are available. While medical treatments may not be permanent solutions, they are ways of coping with urinary incontinence. These can include Kegel exercises or medications that impact the instability of the bladder and improve the tone of the muscle. Often the incontinence will get better and doesn't require any treatment at all. In fact, most men are dry three months after radical prostatectomy. Other treatments would include injectable bulking agents and an artificial urinary sphincter, which is the surgical solution for urinary incontinence.

IV. Male Sling and AUS

A sling acts as a barrier for the urine and creates pressure so that there isn't leakage. The procedure takes about 45 minutes. It is an outpatient procedure, and continence is usually immediately restored. However, some patients, approximately 10 to 15%, will continue to leak and may require another treatment.

The success of the AUS or artificial urethral sphincter is very good. Approximately 96% of patients would recommend it to a friend. If it doesn't work, two sphincters can be put around the urethra, and generally that is 100% successful. When considering a surgical device, if the person utilizes one to three pads, that is considered mild incontinence, and we recommend the sling. If it is three to five pads per day, that is considered moderate and we recommend a single cuff. If it is greater than five, we recommend a double cuff to occlude the urethra.

V. Summary

Incontinence is a common problem in many situations, but you don't have to live with it. A patient should talk to his urologist and his partner before moving on to any of the treatments.

VI. Erectile Dysfunction

Oftentimes, there are psychological factors that impact on a man's ability to have an erection, and that needs to be considered in evaluating erectile dysfunction. In terms of treatment, there's systemic therapy, the vacuum erectile device, penile injections and finally the penile prosthesis, which is the ultimate treatment for erectile dysfunction. Blood has to go to the penis for a man to have an erection, and that is what we are trying to promote when PDE5 inhibitors are utilized as treatment. If a nerve-sparing surgery can't be done, it is unlikely that the systemic drugs will work, however, and head-to-head trials have not been done comparing the three agents. Viagra and Levitra act similarly, and in terms of side effects they include headaches in approximately 18%, flushing, dyspepsia and blurry vision. The complication rate is less with Cialis, but men have told me that the Viagra seems more potent. The vacuum erectile device may seem cumbersome, but it has been very successful if a man can utilize it correctly. Discomfort and the hassle factor are the drawbacks for this particular device. In terms of penile injections, there is fear associated with doing the injections, and there is the possibility of a priapism, which is a prolonged and very painful erection. It can be very serious and is considered an emergency because if it is not treated, it can cause permanent impotency. The ideal penile prosthesis would have natural flaccidity, softening, and a natural erection with rigidity, length, girth and those kinds of things. The problems with the prosthesis include infection, erosion where the prosthesis actually goes through the skin, and malfunction. Men can have both a device for incontinence and the penile prosthesis, but that is rare. The systemic therapy for erectile dysfunction is popular and effective; however, failures do occur. Second-line treatments are successful. The penile prosthesis is the most successful treatment, and it allows men to have sex on demand.

VII. Questions

Mr. Simons

In the area of penile rehabilitation, we are seeing more and more centers working with patients prior to surgery to try to stimulate blood flow thereby stimulating a stronger penile erection before surgery and immediately after surgery implementing similar kinds of procedures.

Isaac Powell, MD

I start my patients on Viagra or Cialis one to two months after the procedure to increase the blood flow. I tell them it may be nine months to a year before they are able to have an erection, but we start them immediately to get the blood flow going after the procedure. I focus on therapy after the prostatectomy.

Participant

How do you deal with shrinkage?

Isaac Powell, MD

It is very controversial whether the penis shrinks after radical prostatectomy. The question is how can one objectively measure that? The tissue itself doesn't shrink because we don't reduce the shaft of the penis. All of the surgery is done on the proximal side. We're not stretching the urethra; it's the bladder that we bring down. There is a diaphragm that keeps that portion of the urethra stable. The blood flow may be decreased, and that may result in what is perceived as shrinkage of the penis.

Kristen Kingzett, MD

As far as the prosthetic penis, does that require a very healthy patient? The surgery looks involved.

Isaac Powell, MD

The anesthesia is a greater risk than actually doing the surgery, and diabetics are at a greater risk for having infections. The procedure is simple.

Radiation Therapy for Prostate Cancer: Management of Side Effects

I. What is radiation?

Radiation is essentially a focal, localized treatment, and what that means is any potential side effects are essentially related to the treatment field. The surrounding tissues are important in terms of the dose that we are going to give and the treatment fields. Part of the treatment planning process is to try to consolidate all of the dose on the prostate by coming from many different angles and providing the least amount to all of the surrounding structures.

II. "Irritative" Symptoms

We generally separate the "irritative" symptoms into acute or late side effects, and most of these symptoms are self-limiting. The acute ones are those that occur during or immediately after radiation, and the late ones are those that occur after six months and usually around one or two years. Again,

there's a wide spectrum in terms of the severity of the symptoms. The symptoms that we see associated with the bladder may include urinary frequency, urgency and stinging. Rectal symptoms may include diarrhea acutely or late hemorrhoidal-type bleeding. In general, there may be fatigue, and perhaps 30 to 40% of men coming in with normal erections have diminished erections. Just like with surgery, the diminished erections really are dependent on what the function was before radiation.

III. Managing Side Effects

With any of the side effects during radiation there is wide range. Some men are able to tolerate it without a problem and it is transient and self-limiting. Others need medicines to assist in the management of the side effects.

IV. Conclusion

The side effects associated with radiation therapy are related to the treatment site. They are typically tolerable, manageable and self-limiting. The side effects can be decreased with better planning and delivery of radiation.

Restoring Quality of Life

I. General Symptoms

Regardless of the patient's treatment choice, he may face depression, anxiety or fatigue. They are often related to each other, and their treatment may also be related. The depression and anxiety come as a reaction to loss, and there are multiple possible losses that could be felt with a cancer diagnosis.

II. Depression

Depressive symptoms may include feeling down or blue most days, hopelessness, mood swings, irritability, loss of sleep or increased sleep, loss of appetite or increased appetite, and social withdrawal, basically isolating one's self from friend and family.

Treating depression can improve quality of life for not only the patient but also for the patient's family. It improves daily functioning, and gives the patient improved ability to participate in treatment. Most beneficial approaches for the treatment of depression come from a combination of medication and non-medication interventions. There are a lot of antidepressants that can be utilized, and the treatment choice will depend on the type of depressive symptoms, other symptoms/side effects and other medical problems. Psychotherapy can also be utilized to treat depression, and it may include crisis intervention, cognitive-behavioral therapy and support groups.

III. Anxiety

Anxiety is often related to the same factors that lead to depression symptoms, and the anxiety may include "panic attacks" and constant worry. There are many different medications for the treatment of

anxiety as well. Psychotherapy can be used for anxiety, and the combination of medication and psychotherapy has been shown to be most effective.

IV. Fatigue

Fatigue is a major factor in quality of life, and radiation therapy, some kinds of chemotherapy, and sometimes hormone therapy are all contributing factors. Pain, lack of sleep and depression can led to fatigue, as can poor nutritional status. Finally, low blood counts or anemia can cause fatigue, but that would be considered a reversible cause of fatigue. Anemia can be treated with blood transfusion or through the use of medication that stimulates blood formulation.

Fatigue is easier to manage if you know what to expect. Ask your doctor for what the pattern and duration of the fatigue might be. Most research supports a defined program of Energy Conservation and Activity Management, which focuses on strategies to conserve and preserve energy. It may also include the delegation or postponing of non-essential activities. The recommendation is also to keep a daily log to identify when a patient has the most energy so that they can plan tasks accordingly.

Exercise is another fatigue treatment. The more you lay around, the less muscle you have, and the less muscle you have, the more energy it takes to do things. Research supports that patients who exercise during or after completion of treatment have significantly less fatigue, less emotional distress, decreased problems with sleep and better overall quality of life. It's also free.

There is additional research that supports YOGA as a treatment for fatigue. The recommendation supports breathing exercises, yoga postures and meditation. Twice weekly YOGA leads to benefit for sleep quality and fatigue and overall improved quality of life.

Sleep therapy is a newer concept, but there are mixed reviews, and sleep disturbance with fatigue is hard to treat. There are a lot of medications being marketed for fatigue, but the research still needs to sort it out. The research so far basically only supports medication use for severe fatigue, and if patients require a narcotic or sedating pain medication, there is some benefit for the medications reversing that fatigue or sleepiness side effect.

V. Questions

Participant

It seems that the treatment after surgery for side effects is more involved than the surgery itself.

Isaac Powell, MD

The surgery for the prostate cancer itself is much more involved and takes much longer than either the surgeries for incontinence or impotency.

Participant

What is the Orion genomics test?

Isaac Powell, MD

Indevus I know is the company. I suspect what they are doing is Orion has some technology that they are looking to license.

In the process of my PSA rising and ultimately a prostate cancer diagnosis, I was a very angry person. I was angry because I thought I was supposed to be treating patients as opposed to being one of the patients being treated. I didn't have time to have prostate cancer was what I thought anyway. My concern was dying from the operation. I had never had a patient die from the operation, but I was concerned about the anesthesia. Well, that didn't occur.

Then in the long-term it was very beneficial for me to have gone through this process. I can tell patients, listen, I've gone through this. I then have their total attention because they don't believe I've had prostate cancer. After they get over the shock that I had it, I have their total attention and that person can then associate with what I'm talking about.

Participant

Could you elaborate on why they say that prostate cancer in African Americans is so progressive?

Isaac Powell, MD

The cancer actually is growing faster in African Americans than in European Americans, and that is based on an autopsy study. In patients who have metastatic disease, the cancer is two or three times greater in the metropolitan area in African Americans compared to European Americans. Those are the men who die from prostate cancer. In the men who had their prostate removed, we found that the volume of disease was greater in African Americans compared to European Americans. If the cancer starts at the same time, at the end point, be it metastatic disease or death, it is two to three times greater. We are looking for the biological and genetic factors that contribute to that. One thing that we know is that the high fat content of their diet causes the cancer to progress more rapidly, and African Americans have a higher fat content in their diet. We also now know that obesity is associated with a more aggressive cancer. African Americans are more likely to be obese, but we are looking at other metabolic syndrome factors such as hypertension. We are finding more biological and genetic factors associated with prostate cancer that are responsible for the difference that we see.