Prostate Cancer in Older Men

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Cancer is a disease process that affects the older person at a higher rate than other age groups (Ershler, 2003). Prostate cancer (Ca P) is the most common male cancer excluding skin cancer, and it is the second leading cause of cancer deaths in men (following lung cancer) (Jemal et al., 2004). While most other cancers “peak,” Ca P incidence continues to increase as men age (Presti, 2004).

To discuss Ca P and the aging man, a definition of the “elderly” or “older” population is required. Literature often uses data from Medicare to define the “elderly” as anyone above age 65. While there is difficulty in using age (or numbers) to define the older patient, it may be the easiest way. There are people younger than 65 who seem older due to a variety of health problems, but there are also people older than age 65 years who seem “young” due to genetics, a healthy lifestyle, and a positive attitude. In this article, older patients will be divided into two categories: those 65 to 74 years of age and those above 75 years of age. For each of these age groups, the treatment options and outcomes for Ca P can be very different. An overview of prostate cancer, treatment options, and side effects will provide a background for the discussion regarding Ca P and older men.

Overview

Ca P is the most commonly diagnosed male cancer. The American Cancer Society estimates that in the year 2004, there will be 230,110 new cases of prostate cancer diagnosed (33% of male cancers diagnosed), and 29,900 deaths (or 10% of all male cancer deaths) (Jemal et al., 2004). How many older patients will be diagnosed or die of prostate cancer is unknown. Since the prevalence of Ca P increases with age and the population of the United States continues to age, it is expected that a significant number of older men will face this diagnosis. The dilemma becomes how to best treat and care for the growing number of men who will seek treatment for prostate cancer.

Risk Factors and Etiology

There are several known risk factors for prostate cancer. These include increasing age, race, family history, and dietary intake of fats (Presti, 2004). A man age 60 to 79 has a probability of 1 in 8 of being diagnosed with prostate cancer, a significant increase compared to a younger man age 40 to 59 who has a 1 in 103 chance of a prostate cancer diagnosis (Presti, 2004). African-American men are at increased risk, although the reason for the phenomena is unknown. Relatives diagnosed with prostate cancer put a man at increased risk. The number of relatives and their age at diagnosis increases the risk; the younger the age of the relative at the time of diagnosis, the higher the relative risk for the male relative (Presti, 2004). A diet high in fat is a possible risk factor. Cadmium exposure (cigarette smoke, alkaline batteries, and working in the welding industry) may increase the risk, although this is a weak risk factor (Presti, 2004).

Published studies do not prove a cause-effect association for vasectomy as a risk factor (Presti, 2004). The underlying reason for the possible relationship is unknown. Elevations in antispermatozoa antibodies, decreases in seminal hormone concentrations, and decreases in prostatic secretion have been reported in men who have undergone vasectomy.
How these effects might relate to the development of Ca P is unknown (Platz, Kantoff, & Giovannucci, 2000). There is also speculation that men who have undergone vasectomy may seek medical care more frequently, leading to earlier diagnosis of Ca P (Presti, 2004).

The etiology of Ca P is unknown. Many theories have been proposed through the years, but none has ultimately been proven. Increased male hormones and infections are two theories that continue to be discussed. What is currently known is that the gene responsible for familial Ca P resides on the long arm of chromosome 1 and PCAP and CAPB genes. In addition, there are tumor-suppression genes in several areas of the human genome that have been identified as possible areas involved in developing Ca P (Presti, 2004). As scientific knowledge of Ca P increases, the cause and natural course of the disease may be discovered.

Signs and Symptoms

Most patients with early-stage Ca P have no signs and symptoms. Patients with locally advanced disease may experience obstructive or irritative signs and symptoms (dysuria, straining, decreased force of stream, hesitancy, increased night frequency) due to extension of the cancer into the urethra or the bladder neck. Metastatic Ca P signs and symptoms include bone pain, spinal cord compression, and/or weakness in the lower extremities.

Pathology

More than 95% of Ca P are adenocarcinoma (Presti, 2004). Other types of Ca P include transitional cell carcinoma, small-cell carcinoma, or sarcoma.

Diagnosis

Prostate cancer is diagnosed by examination of tissue retrieved during a prostate biopsy. Most biopsies are completed because the patient has a rising prostate-specific antigen (PSA) level in the blood. PSA is a glycoprotein that is produced by the prostate gland, and it is elevated with certain prostate conditions such as Ca P, benign prostatic hyperplasia (BPH), prostatitis, and instrumentation of the genitourinary tract (for example, the insertion of a Foley catheter for urinary retention).

The PSA blood test is a valuable tool in detecting Ca P. Normal PSA levels are less than 2.6 ng/ml (Gretzer & Partin, 2003). When the PSA level is 2.6 to 10 ng/ml, the likelihood of Ca P is judged as moderate, but values greater than 10 ng/ml indicate a high level of suspicion (Gretzer & Partin, 2003). The American Urologic Association (AUA, 2000) established variations of PSA levels based on ethnicity and age (see Table 1).

A variety of factors should be considered when evaluating PSA results. Several techniques have been developed to increase the PSA test’s ability to predict the presence of prostate cancer. Following the increase in PSA values over time (PSA velocity), age-specific PSA (a younger man should have a lower PSA), and assessing bound versus unbound portions of PSA (free vs. total PSA) are all methods of helping to identify a patient that needs a prostate biopsy to prove or disprove a cancer diagnosis (AUA, 2000). A fractionated PSA measures free versus protein-bound PSA in the blood. Men with Ca P have a higher proportion of their PSA bound to protein, whereas the proportion of free PSA is higher in men with BPH (Gretzer & Partin, 2003). Measurements of PSA density (PSAD) are useful in men whose original values fall in the moderate suspicion range. PSAD combines the serum PSA value and prostate volume assessed via transrectal prostatic ultrasound. Scores are calculated by dividing the PSA by the prostate volume; men with a score above 0.15 are more likely to have cancer than men with lower values (Gretzer & Partin, 2003).

The result of a digital rectal examination (DRE) also provides data for the health care practitioner. The DRE may identify abnormalities of the prostate, such as nodules, firmness, or subtle variations in the gland that need further evaluation. PSA detects more prostate cancers earlier than a DRE, but the combination of the DRE and PSA is more sensitive than either PSA or the DRE individually.

Screening for Ca P

In Older Men

Screening the general population is a controversial topic, and screening older people is a topic that can generate much discussion and disagreement. The question of screening the general male population for prostate cancer has never been answered definitively. Recommended screening consists

<table>
<thead>
<tr>
<th>Age Range</th>
<th>African Americans</th>
<th>Asians</th>
<th>Whites</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-49 years</td>
<td>0.2-0.4 ng/mL</td>
<td>0.2-0.4 ng/mL</td>
<td>0.2-0.5 ng/mL</td>
</tr>
<tr>
<td>50-59 years</td>
<td>0.4-0.7 ng/mL</td>
<td>0.3-0.6 ng/mL</td>
<td>0.3-0.7 ng/mL</td>
</tr>
<tr>
<td>60-69 years</td>
<td>0.4-0.7 ng/mL</td>
<td>0.4-0.7 ng/mL</td>
<td>0.4-0.8 ng/mL</td>
</tr>
<tr>
<td>70-79 years</td>
<td>0.5-0.8 ng/mL</td>
<td>0.5-0.8 ng/mL</td>
<td>0.6-0.9 ng/mL</td>
</tr>
</tbody>
</table>

Adapted from the American Urologic Association (2000).
of a yearly DRE and a PSA blood test. Evaluating changes in the PSA or DRE allow the health care practitioner to evaluate any variations and to make recommendations regarding the best course for the patient (continued monitoring vs. a prostate biopsy).

When screening for Ca P should stop has never been identified; it is generally felt that a person with a life expectancy of 10 years or less does not need screening since Ca P is generally a slow-growing cancer. The need for screening with its implications and/or stopping the yearly screening process should be discussed by the patient and his health care practitioner (Gerard & Frank-Stromborg, 1998).

Proponents of screening argue that this simple process allows Ca P to be diagnosed at an earlier stage, a stage that is potentially curable. Since Ca P is such a prevalent diagnosis, early detection and cure can reduce the risk of metastatic disease. Opponents of prostate cancer screening argue that screening has not ultimately changed the outcome for patients with prostate cancer. They also feel that the emotional and financial costs of screening are unnecessary. Screening has resulted in anxiety for men and their partners as well as unnecessary procedures (for example, prostate biopsies and scans). Opponents also believe that older men found to have prostate cancer through screening may be treated unnecessarily. This can lead to significant sequelae that affect quality of life (Vaughn, 1998).

While a PSA is a “simple” blood test, the implications of testing should be discussed with the patient and his health care practitioner prior to the process. A patient with multiple medical problems and/or one who does not have a life expectancy of 10 years probably does not need to subject himself to this process. Many older men may fit into this category (Vaughn, 1998).

### Grading and Staging

If a biopsy is positive, the pathologist identifies the two most commonly occurring patterns (grades) of tumor in the biopsy tissue and adds those numbers together to give the cancer a Gleason score. Gleason scores range from 2 to 10, and are usually represented as a sum. For example, 3 + 4 = 7 for a Gleason score of seven. This is an important piece of information; the higher the Gleason score, the more aggressive the cancer. It is an important factor for determining treatment options. Tables 2a and 2b further explain the Gleason scale.

### Under a low-powered microscope, five specific patterns of prostate cancer cells have been identified (“grades”). These are numbered 1 through 5.

<table>
<thead>
<tr>
<th>Table 2a.</th>
<th>Gleason Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adding the two most common patterns seen in a prostate biopsy specimen gives the Gleason score (for example, Gleason 3 + 3 = 6 or Gleason 4 + 3 = 7). The first number represents the most common pattern in the specimen, the second number the next most common pattern.</td>
<td></td>
</tr>
</tbody>
</table>

Predictable method of assessing aggressiveness of prostate cancer. Helpful in categorizing patients for prognosis; for instance, Gleason 4 + 3 = 7 has a less favorable prognosis than Gleason 3 + 4 = 7 due to the 4 in the former example representing a larger portion of the specimen being more poorly differentiated.

Table 2a. Gleason Score

<table>
<thead>
<tr>
<th>Gleason score 2 to 4</th>
<th>• Well differentiated.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Small glands that are closely packed.</td>
</tr>
<tr>
<td></td>
<td>• Cancer cells behave in “predictable” manner.</td>
</tr>
<tr>
<td></td>
<td>• Least aggressive, least likely to metastasize.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gleason score 5 and 6</th>
<th>• Moderately well differentiated.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Variable-sized glands with little stroma.</td>
</tr>
<tr>
<td></td>
<td>• May also see a cribriform pattern of several cells fused together.</td>
</tr>
<tr>
<td></td>
<td>• Cancer cells behave in “predictable” manner.</td>
</tr>
<tr>
<td></td>
<td>• Most common grade.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gleason score 7</th>
<th>• Can be considered a moderately well differentiated or poorly differentiated cancer.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Glands are incompletely formed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gleason score 8 to 10</th>
<th>• Poorly differentiated.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Single cells have broken away and may be found within vascular lumen.</td>
</tr>
<tr>
<td></td>
<td>• Cancers cells can behave in unpredictable manner.</td>
</tr>
<tr>
<td></td>
<td>• Aggressive cancer.</td>
</tr>
</tbody>
</table>

Visceral metastasis may occur to regional lymph nodes or to bone. Distant metastasis is usually to the bladder neck, or the urethra. Advanced prostate cancer may invade the bladder trigone, the seminal vesicles. Locally prostate (extracapsular extension or invasion modality alone (for example, surgery or radiation therapy). Multimodality treatments are currently being studied as a part of clinical trials, and these options may include chemotherapy followed by surgery, surgery followed by external beam radiation therapy or chemotherapy, or hormone therapy and radiation therapy (Zippe & Kedia, 2000).

**Advanced Ca P** For advanced Ca P (cancer that has spread beyond the prostate), the treatment involves decreasing or stopping the production of testosterone, the “fuel” that can cause the cancer to spread. Testosterone is a product of the testicles (primary source) and the adrenal glands. Medical or surgical castration is an option available to the patient.

Surgical castration (bilateral orchectomy) involves the surgical removal of the testicles, the primary source of testosterone. While this may not be the preference of men in the United States currently, it is the most cost-effective method of stopping the production of testosterone and slowing the spread of Ca P.

Medical castration involves the use of medications to prevent the production of testosterone by the testicles. Luteinizing hormone releasing hormone (LHRH) agonists are injections of medications that the patient receives at intervals (monthly, every 3 or 4 months, or yearly) to block testosterone production. Anti-androgen medication blocks the use of testosterone produced by the adrenal glands. In addition, there are clinical trials involving the use of hormonal or nonhormonal medications to decrease testosterone production.

Following definitive treatment for Ca P by surgery or radiation therapy, each physician has a protocol to evaluate the patient. If the PSA begins to rise, this indicates that the cancer has recurred, and the next step in treating the patient depends upon the primary treatment that the patient

### Table 3.

**TNM Staging System**

<table>
<thead>
<tr>
<th>T (tumor)</th>
<th>TX: tumor cannot be assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0: no evidence of primary tumor</td>
<td></td>
</tr>
<tr>
<td>T1: tumor not clinically apparent</td>
<td></td>
</tr>
<tr>
<td>T1a: tumor found in resected specimen (&lt;5%)</td>
<td></td>
</tr>
<tr>
<td>T1b: tumor found in resected specimen (&gt;5%)</td>
<td></td>
</tr>
<tr>
<td>T1c: tumor found at biopsy for elevated PSA</td>
<td></td>
</tr>
<tr>
<td>T2: tumor confined to prostate</td>
<td></td>
</tr>
<tr>
<td>T2a: tumor involves one lobe of prostate</td>
<td></td>
</tr>
<tr>
<td>T2b: tumor involves both lobes of prostate</td>
<td></td>
</tr>
<tr>
<td>T3: tumor palpable, extends beyond capsule</td>
<td></td>
</tr>
<tr>
<td>T3a: tumor extends beyond capsule (unilateral, bilateral)</td>
<td></td>
</tr>
<tr>
<td>T3b: tumor invades seminal vesicles</td>
<td></td>
</tr>
<tr>
<td>T4: tumor is fixed or invades adjacent anatomy (other than seminal vesicles)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N (node)</th>
<th>NX: regional lymph nodes cannot be assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>N0: no regional lymph node metastasis</td>
<td></td>
</tr>
<tr>
<td>N1: metastasis to regional lymph node(s)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M (metastasis)</th>
<th>MX: presence of distant metastasis cannot be assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1a: metastasis to nonregional lymph nodes</td>
<td></td>
</tr>
<tr>
<td>M1b: metastasis to bone</td>
<td></td>
</tr>
<tr>
<td>M1c: metastasis to other distant sites</td>
<td></td>
</tr>
</tbody>
</table>


metastasis. Despite a relatively low PSA or favorable Gleason score, accurately staging the disease enables a better estimation of treatment options. See Table 3 for further description of the TNM staging system.

**Progression of Prostate Cancer**

Prostate cancer can spread locally, lymphatically, or hematogenously. Local spread means the cancer has spread outside the prostate (extracapsular extension or into the seminal vesicles). Locally advanced prostate cancer may invade the bladder trigone, the bladder neck, or the urethra. Distant metastasis is usually to the regional lymph nodes or to bone. Visceral metastasis may occur to the lung, liver, and adrenal glands (Presti, 2004).

**Treatment Options**

The treatment of Ca P depends upon the patient’s age, the stage and grade of the cancer, severity of co-morbid conditions, and the patient’s preference. It is important for the patient to realize that all treatment options for prostate cancer have side effects. Table 4 lists treatment options available for the patient with Ca P.

**Locally advanced Ca P** For localized Ca P (cancer that is contained within the prostate), the treatment options include observation (“watchful waiting”), surgery (radical retropubic, perineal, laparoscopic, or da Vinci robotic-assisted prostatectomy), radiation therapy (brachytherapy or external beam radiation therapy [EBRT]), and cryosurgery. Brachytherapy and EBRT may be done singly or in combination, and may also include hormone therapy.

**Locally advanced Ca P** Locally advanced Ca P is not likely to be cured by a single treatment modality alone (for example, surgery or radiation therapy). Multimodality treatments are currently being studied as a part of clinical trials, and these options may include chemotherapy followed by surgery, surgery followed by external beam radiation therapy or chemotherapy, or hormone therapy and radiation therapy (Zippe & Kedia, 2000).
received. For the patient who has had surgery, treatment options might include observation, radiation therapy (the patient with a positive margin), or hormone therapy (the patient with metastatic disease). For the patient who has undergone radiation therapy, the treatment options might include observation, surgery (salvage prostatectomy), cryotherapy, or hormone therapy. Enrollment in a clinical trial may be an option if the patient meets the eligibility requirements.

Hormone refractory Ca P. Hormone-refractory Ca P occurs when hormone therapy has failed and the PSA values continue to rise indicating cancer progression. Checking the testosterone level to verify that the patient is at castrate level (less than 50 ng/ml) is important. If the patient’s testosterone is not at castrate level, the patient should begin LHRH agonist therapy. If the patient’s testosterone is at castrate level, the patient should consider enrolling in a clinical trial. The current methods to manage the patient with hormone-refractory disease have met with limited success (Smith, Dawson, & Trump, 2000).

Side Effects of Ca P Treatments

All treatments for prostate cancer have side effects. It is important for the patient to be aware of these effects because the side-effect profile may help the patient decide which is the best treatment option for him.

Observation or “watchful waiting” (monitoring the patient by a PSA blood test and a DRE at a predetermined time period) may have a psychological effect for the patient. It is often difficult for him to know that he has cancer and is “doing nothing.” The man may be comfortable with this option, but his family and/or friends may not be. They may encourage the patient to “do something” to treat the cancer causing the man to suffer from additional psychological stress.

Surgical removal of the prostate is a major procedure with the potential and side effects of any major surgical procedure such as the potential for infection, pneumonia, blood clots, etc. Additional side effects of radical prostatectomy may include postoperative incontinence and impotence. Postoperative incontinence is usually temporary but stress incontinence (such as leaking a few drops of urine when coughing, laughing, lifting heavy objects) may persist indefinitely. Potency rates vary postoperatively, even if a bilateral nerve-sparing procedure was completed. For men between ages 60 to 69, potency rates with a bilateral nerve-sparing procedure can range from 25% to 75% (Presti, 2004). For men in that age range who have undergone a unilateral nerve-sparing procedure, the potency rates can range from 10% to 50% (Presti, 2004). Recovery of spontaneous erections can take a year or longer (Presti, 2004).

Brachytherapy (implantation of radioactive “seeds” into the prostate gland) is a procedure that is done in the operating room with general anesthesia. The side effects may include the risks of general anesthesia, as well as specific side effects from the radiation. Irritative voiding symptoms (urgency, frequency, dysuria) are common. These symptoms can be treated with medications. The use of tamsulosin HCl (Flomax®), doxazosin (Cardura®), or terazosin

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**Table 4. Treatment Options for Prostate Cancer**

| Localized (T1, T2)                      | • Observation/watchful waiting  
|                                      |   • Surgery: Radical retropubic  
|                                      |   • Radical perineal  
|                                      |   • Laparoscopic  
|                                      |   • Da Vinci robotic-assisted  
|                                      |   • Radiation therapy: Brachytherapy  
|                                      |   • External beam radiation therapy (EBRT) combination  
|                                      |   • Cryosurgery  
| Locally advanced                     |   • Surgery  
|                                      |   • Radiation therapy  
|                                      |   • Combination therapy  
|                                      |   • Clinical trials (hormones + EBRT)  
|                                      |   • Chemotherapy + surgery  
|                                      |   • Surgery + chemotherapy  
|                                      |   • Surgery + EBRT  
|                                      |   • Hormones + EBRT  
| Metastatic                          |   • Surgical castration (bilateral orchietomy)  
|                                      |   • Medical castration with luteinizing hormone releasing hormone (LHRH) agonist with or without anti-androgen medication  
| Rising PSA following definitive treatment (surgery or radiation therapy) |   • Observation  
|                                      |   • Radiation to prostatic fossa (after surgery)  
|                                      |   • Medical or surgical castration  
|                                      |   • Clinical trial  
| Hormone resistant                    |   • Continue LHRH agonist  
|                                      |   • Second-line hormone therapy  
|                                      |   • Clinical trial  

Adapted from Daw & Peereboom (2001); Presti (2004); Zippe & Kedia (2000).
(Hytrin®) may help relieve the symptoms. Phenazopyridine (Pyridium®) may be useful to alleviate the burning feeling that the patient may also experience. A small percentage of patients (usually less than 10%) will experience urinary retention due to swelling of the prostate from the radiation (Speight & Roach, 2004). This will usually resolve in time and is treated in the short term with intermittent self-catheterization (ISC) (Jhaveri & Klein, 2001).

External beam radiation therapy (EBRT) can be done by the conventional 3-D conformal method. This uses imaging and computerized treatment planning software that allows a high-dose radiation to conform to the prostate with greater sparing of the surrounding normal tissue. The radiation is usually fractionated over 35 to 37 treatments. This same technology allows the delivery of a higher dosage of radiation without unacceptable toxicity, providing better local control of prostate cancer in select patients; this technique is known as intensity-modulated radiation therapy (IMRT) (Speight & Roach, 2004).

Common side effects related to either EBRT or IMRT include the irritative urinary symptoms of urgency, frequency, and dysuria. These may be treated with medications described earlier and usually subside with time. Urethral strictures and radiation cystitis (in less than 10% of patients) can occur (Speight & Roach, 2004). In addition, there may be rectal discomfort (the prostate sits in front of the rectum and radiation can affect the rectum) and/or rectal urgency. Treatment with Anusol® (hydrocortisone) suppositories or Sitz baths provides relief for these symptoms, which usually diminish over time. Anal stricture and radiation proctitis are rare complications (Speight & Roach, 2004).

Side effects of a combination of brachtherapy and EBRT are the same as described previously, but the effects may be intensified due to the combined effect of the treatments (Speight & Roach, 2004). Cryosurgery or freezing of prostate tissue is also a treatment option for Ca P. This is done in the operating room under general anesthesia. The ice destroys the Ca P tissue and prostate tissue. Side effects may include impotence and urinary tract obstruction (due to necrotic prostate tissue).

The main side effect of hormone therapy with the LHRH agonist medication is hot flashes. Vitamin E or Megace® may help to alleviate this symptom, but if the hormone therapy is being done in conjunction with radiation therapy, the use of vitamin E is not recommended. Vitamin E is an antioxidant and radiation therapy works through oxygen radicals. There could potentially be some scavenging of this which would negate the effectiveness of the radiation therapy. It is commonly thought that this effect decreases over time (Speight & Roach, 2004).

Other side effects may include erectile dysfunction, loss of libido, increased appetite, weight gain (especially in the waist area), decreased energy, muscle wasting, anemia, and mood changes. One of the long-term sequelae of the LHRH agonists is osteoporosis. Diet and exercise (especially weight-bearing exercises) are interventions that may lessen the effects of LHRH therapy.

Anti-androgen therapy side effects vary according to the medication, but all can result in some degree of feminization or regression of secondary sexual characteristics, loss of libido, and erectile dysfunction. Nilutamide (Nilandron®) can cause nausea, hot flashes and affect night vision. Flutamide (Eulexin®) can cause nausea, diarrhea, hot flashes, and breast tenderness. Bicalutamide (Casodex®) can cause gynecomastia. Rare cases of hepatotoxicity with flutamide have been reported (Daw & Peereboom, 2001).

Older Men and Ca P Treatment

Older men diagnosed with Ca P can vary in age (from 65 years to more than 85 years). Each man may experience a wide variation in co-morbid conditions which requires that each man be individually assessed based his overall health prior to any discussion regarding the best treatment for Ca P. Health care practitioners must be aware of two situations that may be more prevalent in older men. Some men may believe that “whatever the doctor decides” is the thing that they will do because “the doctor knows best.” These men should be encouraged to ask pertinent questions that will help them to understand what they will experience when they agree to a specific treatment.

The patient and his spouse may be so overwhelmed by the diagnosis of cancer that they hear nothing after hearing the word “cancer.” For many of these men the word “cancer” has a very negative connotation of great suffering and death, and it is one of the most feared medical diagnoses (Balducci, 2003). For this patient and spouse, there is no one way that will guarantee that the patient makes an educated treatment decision. Written material as well as a verbal discussion of treatment options may be helpful. In addition, an identified resource person who can answer questions as they arise can also help. As Ca P is typically a slow-growing cancer, the patient and his family have time to consider the treatment that will best suit the patient and his lifestyle.

Health care workers dealing with the older man and his partner need to realize that the patient may experience difficulty in seeing and hearing. Men may seem to agree to everything that is discussed, when in reality, they have
not heard and therefore have not understood what has been presented. Assessing the patient for a hearing or sight problem during the initial history and physical examination will help identify men who have special needs. For the patient with limited sight, information should be given verbally, and written information should be in a larger-than-normal font. For the patient who has difficulty with hearing, speaking slowly and distinctly will help and should be supplemented with written information.

Ca P in men age 65 to 74. Many men between the ages of 65 and 74 years have the potential for a long life, especially if they do not have multiple medical problems. For those men, surgery or radiation therapy is a viable option that can potentially cure their prostate cancer. Each man needs to identify what is important to him and what side effects he is willing to endure to meet those ends. Knowing the side effects may help the man decide which option will be the best option for him.

The surgical treatment option for a man older than age 70 years without significant medical problems becomes slightly less cut. This patient may have unknown underlying medical problems that could affect the surgical experience. Older men may take longer to recover from surgery and may also experience a slower recovery of continence. In addition, potency is less likely to be recovered in this population (Presti, 2004). Whether this is due to the surgery or the likely co-morbid conditions is unknown. If the patient understands the risks and wishes to pursue surgery as his preferred treatment option, the urologist is likely to recommend additional testing to rule out co-morbid conditions and ensure that the patient is in optimal condition to undergo a major surgical procedure.

For the 65 to 70-year-old man with multiple medical problems and/or an expected lifespan of less than 10 years, a form of radiation therapy may be the recommended treatment option. This is especially true for the patient with a high-grade prostate cancer. While radiation can have side effects, a higher-grade cancer can potentially be cured with radiation therapy, and prevent the significant effects that metastatic cancer involves.

Ca P in men over 75 years of age. Older men have a great fear of cancer and the pain and suffering that may occur with the diagnosis. For men with a low-grade cancer (Gleason six and below), observation may be a very reasonable option. Many men (or their partners) may not be comfortable psychologically with this option, since they do not feel that they are actively treating the cancer. Continued support and encouragement may help the man and his partner understand that this cancer is not likely to be life threatening. The man and his partner must be told that if there is a need to institute treatment, the treatment will be started. The treatment can be either radiation therapy or hormone therapy depending upon the particular patient situation. For example, if the patient’s cancer spreads, hormone therapy would be appropriate. Likewise, if the patient becomes psychologically uncomfortable due to a rising PSA, radiation therapy might be the best treatment. Individual situations will dictate the best treatment for this patient population.

No less treatment option for the patient over 75 years of age with an aggressive prostate cancer (a Gleason score of seven or above), there needs to be a discussion of treatment options because these men may die of their prostate cancer (and not with the prostate cancer). Radiation therapy and/or hormone therapy will be the treatment(s) of choice. Helping the man and family understand what to expect, how to deal with side effects, and who to call with questions or concerns will help these patients and families through the difficult time.

Often the caregiver of this patient population is overlooked. An elderly spouse may need to take care of matters that she never had to do before such as assistance with ADL or managing the family finances. Helping the patient deal with side effects of treatment, as well as dealing with the suffering of the loved one can be very stressful. If the patient has no spouse, these duties will fall to another family member such as a child or grandchild who has responsibilities of his or her own. These issues should be addressed when providing information regarding treatment options and side effects (Haley, 2003).

Nursing Implications

There are many patient populations that struggle with decision-making issues following a medical diagnosis; patients with prostate cancer commonly fall into this category. There is not one treatment option that is the best for every patient. What is very important is that each patient understands what options are available for him, what the potential side effects of those options can be, and how he will need to deal with the side effects of the treatment. A urology nurse is in an ideal situation to help the patient and family through education, support, encouragement, and active listening. By performing these actions, the nurse will be able to help the patient become an educated consumer — one that makes the best treatment decision for a dreaded cancer.

The older patient has additional needs, such as sensory needs that should be addressed. For a patient to be able to make a decision, he needs to understand his options. If he cannot hear or see, it is more difficult to make informed choices. If he has memory problems (short or long term),
the nurse may be asked to repeat the information or answer the same questions repeatedly as the patient tries to understand his diagnosis and options. In addition, this could represent a situation in which there is a question of whether or not the patient is competent to make treatment decisions. Identifying resources (written, tapes, and people) will help the patient arrive at a basic understanding of his disease and his treatment options. The nurse must help the patient about co-morbidities (lung, heart, and/or kidney disease) that may influence treatment options that are available. If the Ca P results in a terminal diagnosis, the nurse must help the patient and his family explore end-of-life (EOL) options (see the EOL manuscript by Paula Forest in this issue).

Conclusions
There is much controversy regarding screening for Ca P and treatment following a diagnosis of Ca P in the older male. Because the natural history of Ca P is unpredictable, there is no way of knowing which prostate cancer will be clinically significant and cause problems for the patient. Nor is there a way to know which cancers will never cause a clinical problem for the patient. As the knowledge regarding the natural history of Ca P continues to evolve, some of these questions will be answered which will make the decision about treatment easier. Until then, health care practitioners need to educate, support, and listen to patients and their families.

References
Prostate cancer affects the prostate gland in men. Learn about risk factors, symptoms, treatments, and outlook. Prostate cancer is a serious disease that affects thousands of men each year who are middle-aged or older. About 60 percent of the cases occur in men older than age 65. The American Cancer Society (ACS) estimates that 174,650 American men will be newly diagnosed with this condition in 2019. The prostate is a small gland found in a man’s lower abdomen. It’s located under the bladder and surrounding the urethra. The prostate is regulated by the hormone testosterone and produces seminal fluid, also known as semen. Semen is the substance containing sperm that exits the urethra during ejaculation.