Free research paper on prostate cancer prevention and treatment

Health & Medicine, Cancer



Prostate cancer develops in the prostate, and although it usually takes time to develop, it can be aggressive and progress quickly. The cancer cells will spread locally first, but they will often metastasize to other organs and tissues, such as the bones and lymph nodes, when the disorder progresses to advanced stages. Symptoms of prostate cancer can include difficulty urinating, nocturia, increased frequency, and various other bladderassociated symptoms. However, symptoms usually do not occur in prostate cancer until the disorder reaches advanced stages, so proper screening and prevention methods are required to promote patient safety.

According to the Centers for Disease Control and Prevention (CDC, 2013), specific evidence-based screening and prevention methods are not yet fully developed. The U. S. Preventive Service Task Force claims the current amount of evidence is insufficient for establishing routine screening recommendations, and overtreatment often outweighs the benefits of preventive interventions (Chou et al., 2011). Other organizations may offer different suggestions, such as an annual digital rectal examination (DRE) for men over 50 years of age and an annual prostate specific antigen (PSA) test form men over 60 years of age (Arcangelo & Peterson, 2013). The DRE is used to determine whether the prostate has lumps or abnormalities while the PSA test measures the blood levels of PSAs, which are higher in patients with prostate issues. If both tests appear to be positive, ultrasound should be performed to confirm the diagnosis and avoid false positives.

Most cases of prostate cancer occur in patients over 50 years of age (Siegel, Ward, Brawley, & Jemal, 2011), and more than 80 percent of those cases occur in patients over 65 years of age (Arcangelo & Peterson, 2013), so it is important to consider how age affects prevention and treatment. Adults usually engage in prostatectomy or radiation therapy before using drug therapy while the treatment in elderly patients depends on other medical conditions and remaining life expectancy.

In elderly patients, it is also important to consider that aging often causes benign prostatic hyperplasia (BPH). BPH is prevalent in people over 65 years of age and shares similar symptoms with prostate cancer, such as diminished or obstructed urine stream, painful urination, and nocturnal voiding, so the healthcare provider needs to perform a differential diagnosis. If the patient shows extremely high scores on the American Urological Association's Symptom Index Scale, the physician needs to order tests for detecting prostate cancer (Arcangelo & Peterson, 2013).

Pharmacological treatment is usually similar for all age groups, but elderly patients may experience more side-effects. In prostate cancer, the goal of therapy is to normalize the urinogenital functions after performing other treatment procedures (Arcangelo & Peterson, 2013). Some drugs need to be avoided in elderly patients. For example, doxazosin can alleviate urination issues, but it can also produce adverse events when combined with antihypertensive drugs (Cerner Multum, 2010).

As a general rule, medication in prostate cancer is used in combination therapy with other treatments. If cancer remains after surgery, hormonal therapy or medication therapy may be considered. However, because hormonal therapy itself does not cure prostate cancer and loses effectiveness over time, it can be used with or succeeded by chemotherapy (American Cancer Society, 2013). Docetalex is often the first line of chemotherapy for prostate cancer in adults, but it may cause severe sideeffects in elderly patients, so it is used only in palliative care with elderly patients when necessary (Cerner Multum, 2013).

When using drug therapy in prostate cancer, long-term considerations often outweigh the short-term considerations. Because 80 percent of prostate cancer patients are over 65 years of age, death will most likely occur before prostate cancer slowly progresses. Therefore, the physician needs to understand how the therapy benefits could prove insignificant when compared to potential adverse events. In adults, the possibility of overtreatment needs to be considered before engaging in any form of therapy.

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