Navigating Treatment of Metastatic Castration-Resistant Prostate Cancer: Nursing Perspectives

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**Background:** Treatment of metastatic castration-resistant prostate cancer (mCRPC) has evolved rapidly. In particular, five new treatments that extend survival in mCRPC have been approved since 2010, including the chemotherapy cabazitaxel (Jevtana®), hormonal agents abiraterone (Zytiga®) and enzalutamide (Xtandi®), vaccine sipuleucel-T (Provenge®), and radiopharmaceutical radium-223 (Xofigo®); all have different indications and toxicity profiles.

**Objectives:** This review discusses treatment advances in mCRPC, including considerations for side-effect management and treatment sequencing. Studies relating to quality of care in prostate cancer are also discussed.

**Methods:** Nonsystematic searches were performed on published manuscripts and abstracts from major oncology or urology congresses, focusing on practical characteristics of the previously mentioned new treatments that extend survival in mCRPC, as well as studies relating to quality of care and the role of nurses in prostate cancer management.

**Findings:** To ensure that patients derive optimal clinical benefit, assessing overall health and proactively managing expected side effects are essential. Treatment sequencing in mCRPC is an important consideration, but clinical data in this area are limited. Despite medical advances in mCRPC, studies have identified other aspects of care in which improvement is needed. Nurses can make major contributions to addressing supportive care needs, which has been shown to improve patient care and outcomes in prostate cancer. Although patient navigation programs have improved coordination of care, inconsistent implementation among centers has been identified for prostate cancer. Greater use of outcome measures can help to identify unmet patient needs.

**Results:** Although curative options for metastatic prostate cancer exist, androgen-deprivation therapy (ADT), via bilateral orchiectomy (surgical castration) or luteinizing hormone-releasing hormone (LHRH) agonists or antagonists, is standard first-line treatment. ADT decreases testosterone levels, which is critical because prostate cancer relies heavily on the androgen hormone, testosterone. Therefore, standard first-line treatment is androgen-deprivation therapy (ADT), via bilateral orchiectomy (surgical castration) or luteinizing hormone-releasing hormone (LHRH) agonists or antagonists.

Prostate cancer is the most common cancer and second leading cause of cancer-related death in men in the United States (National Comprehensive Cancer Network [NCCN], 2015; Siegel, Ma, Zou, & Jemal, 2014). Since 2010, several therapies have received approval in the United States for the treatment of metastatic castration-resistant prostate cancer (mCRPC) (NCCN, 2015). The availability of multiple treatments, combined with the inherent heterogeneity of patients with mCRPC, complicates regimen selection and patient care. Therefore, the role of nurses and nurse navigators in prostate cancer management is becoming increasingly specialized to better coordinate care.

The current authors discuss the treatment paradigm for mCRPC, focusing on practical characteristics of newer therapies and treatment sequencing. Studies relating to quality of care and the role of nurses in prostate cancer management are discussed.

**Treatment Advances in Metastatic Prostate Cancer**

No curative options for metastatic prostate cancer exist, and choice of systemic therapy is based on patient hormonal status, specifically androgen levels. Tumor growth is heavily reliant on the androgen hormone, testosterone. Therefore, standard first-line treatment is androgen-deprivation therapy (ADT), via bilateral orchiectomy (surgical castration) or luteinizing hormone-releasing hormone (LHRH) agonists or antagonists.