Metastatic Prostate Cancer

An update on treatments and a review of patient symptom management

Lawrence Drudge-Coates, MSc, Dip/He, RGN, Anthony Delacruz, RN, ANP-BC, Richard Gledhill, BSc, RGN, Philiz Goh, RN, BScN, CON(c), BSc, MN-HSLA(c), and Brian Tomlinson, MPA

BACKGROUND: Available treatment options have improved overall survival and contributed to delayed progression, but metastatic prostate cancer remains incurable. Treatment strategies are based on disease progression assessed by a combination of biochemical, radiographic, and symptomatic changes.

OBJECTIVES: The aim of this article is to review metastatic prostate cancer, symptoms representing disease progression, disease treatments, and symptom management.

METHODS: A PubMed® search restricted to English-language articles published since 1990 was conducted in August 2018 with combinations of the keywords “metastatic prostate cancer,” “symptom assessment,” and “treatment.” Review articles were excluded, but their reference lists were reviewed to identify additional articles. Information from relevant articles published after August 2018 was added as appropriate based on author consensus.

FINDINGS: Nursing professionals play vital roles in symptom recognition and reporting, identification of disease progression, patient education, and implementation of individualized treatment strategies.

THE BURDEN OF PROSTATE CANCER IS SIGNIFICANT. Worldwide, it was the fourth most frequently diagnosed cancer type, with an estimated incidence of 1.27 million cases, and was ranked eighth among causes of cancer-related deaths, with an estimated 358,989 deaths among men in 2018 (International Agency for Research on Cancer & World Health Organization, 2018). In the United States, it is the leading cancer type among men in terms of incidence, with an estimated 191,930 new cases diagnosed in 2020, and the second most frequent cause of cancer-related death among men, with an estimated 33,330 deaths in 2020 (Siegel et al., 2020). At diagnosis, the disease is local, regionally disseminated, or distant in 78%, 12%, and 5% of men, respectively (Siegel et al., 2020). Estimates from Europe indicate that prostate cancer ranks fourth among the most frequently diagnosed cancer types overall, with an estimated 450,000 new cases being diagnosed in 2018 (Ferlay et al., 2018). Estimates indicate that prostate cancer will account for 78,800 deaths in Europe in 2020 (Carioli et al., 2020).

Despite therapies that have improved survival and delayed progression, metastatic prostate cancer remains incurable (Chi et al., 2019; Davis et al., 2019; Fizazi et al., 2017, 2019; Hussain et al., 2018; James et al., 2016; Parker et al., 2018; Smith et al., 2018). Disease progression, determined by biochemical, radiographic, and symptomatic changes (Saad et al., 2018; Scher et al., 2016), drives treatment decisions. As members of interprofessional teams, nurses provide assessments and symptom management in a safe and cost- and time-efficient manner (Drudge-Coates et al., 2019). This article provides an update about prostate cancer treatment management.

Disease Course

Disease progression in prostate cancer occurs in stages characterized by the development of metastases over time and appearance of symptoms. Localized prostate cancer is curable, with five-year survival rates being close to 100% (Siegel et al., 2018). Although prostate cancer that recurs after localized therapy is initially responsive to androgen deprivation therapy (ADT) involving surgical or chemical castration or nonsystemic salvage treatments (i.e., radiation therapy, surgery, or ablation), the disease progresses eventually within five years (Crawford et al., 2017). This