Men with prostate cancer may be at increased risk for metabolic syndrome, cardiovascular disease, and diabetes from androgen deprivation therapy (ADT). This article reviews current literature related to potential adverse effects of using ADT for localized prostate cancer. The use of gonadotropin-releasing hormone agonist therapy for prostate cancer in the early 1990s compared to the late 1990s is addressed. Oncology nurses play an important role in educating men about strategies for preventing and reducing side effects of cancer treatment. Therefore, having knowledge regarding the impact of hormone therapy on men’s health will be important to prostate cancer survivors.

**At a Glance**

- Localized prostate cancer increasingly is managed with androgen deprivation therapy.
- Patients who receive hormone therapy for prostate cancer may have an increased risk of developing metabolic syndrome, cardiovascular disease, and diabetes early in the treatment period.
- Educating men about potential adverse effects of using hormone therapy for prostate cancer is vital.

**Gonadotropin-Releasing Hormone Agonist Therapy**

Approximately 33% of prostate cancer survivors in the United States currently receive a GnRH agonist (Smith, 2007). Not long ago, this type of ADT was used mainly for metastatic disease (Smith). More recently, GnRH agonist therapy has become part of a management plan for many men with localized prostate cancer (Cooperberg et al., 2003).

A population-based study examined the use of a GnRH agonist in more than 100,000 older adult men with prostate cancer during the 1990s using statistics from the SEER Medicare database (Shahinian et al., 2005). Men with localized prostate cancer represented 36% of the study population, whereas locally advanced or metastatic disease accounted for 21%. In the study, GnRH agonist therapy was initiated within six months of diagnosis and the mean number of doses received was 11.9. The 30% increase in GnRH agonist use was evident for localized and locally advanced prostate cancer.