The primary local stage at diagnosis predicts regional symptoms caused by local progression in patients with castration-resistant prostate cancer.

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Abstract

OBJECTIVE: To identify the characteristics that predict occurrence of local progression-related events (LPREs) in patients with castration-resistant prostate cancer (CRPC) to adjust its management.

METHODS: We retrospectively reviewed the medical records of 39 patients with CRPC. LPREs were defined as regional symptoms caused by local progression and categorized into urinary events and rectal events. Urinary events were defined as ureteral obstruction, acute urinary retention, or hematuria requiring treatment, and rectal events were rectal obstruction or rectal bleeding caused by tumor invasion.

RESULTS: The median prostate-specific antigen level at diagnosis was 185 ng/mL. During the median follow-up period of 4.4 years, 10 patients (25.6%) had LPREs. Urinary events were observed in 8 patients (20.5%) and rectal events in 2 (5.1%). The proportion of T4 in patients with LPREs was higher than in those without LPREs (70.0% vs. 10.3%; P <.001). Stage T4 at diagnosis was an independent factor to predict LPREs in multivariate analysis (hazard ratio, 8.62; P = .004). The 5-year cumulative incidence of LPREs in patients with stage T4 was 70.0%, whereas in those with stage ≤T3, they were 3.6% (P <.001).

CONCLUSION: Patients with stage T4 at diagnosis are more likely to have a risk of LPREs than those with stage ≤T3. These results indicate that patients with locally advanced prostate cancer on androgen deprivation therapy need to be closely monitored for early diagnosis of CRPC and treated with the appropriate intervention for LPREs at the appropriate time.