
Diagnostic characteristics of lethal prostate cancer.

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Abstract

BACKGROUND: The diagnostic characteristics of men who eventually die from prostate cancer (PCa) and the extent to which early diagnostic strategies have affected these characteristics are unclear. We aimed to investigate trends in survival and clinical presentation at diagnosis in men who eventually died from PCa.

PATIENTS AND METHODS: Based on the national database, the Danish Prostate Cancer Registry, a nationwide population-based study of all 19,487 men who died from PCa in Denmark between 1995 and 2013 was conducted. Trends in median survival and trends in age, prostate-specific antigen (PSA), clinical stage, and Gleason score (GS) at diagnosis were analysed.

RESULTS: A total of 46.9%, 16.8%, and 36.3% had metastatic (M+), locally advanced/lymph node positive (LaN+), and localised disease, respectively, at diagnosis. Only 0.15% had localised disease, GS ≤ 6 and PSA<10. Over time, the proportion of men with M+ disease at diagnosis decreased from 54.0-38.3% (p < 0.0001), whereas the proportion LaN+ disease increased from 8.6-27.3% (p < 0.0001). The proportion of localised disease remained stable at 33.2-41.9%. Median survival increased 2.11 years from 1.88 (95% CI: 1.68-2.08) in 1995 to 3.99 (95% CI: 3.71-4.28) years in 2013, p < 0.0001.

CONCLUSIONS: In a large population-based study, the results confirmed concurrent literature that the majority of men who eventually died from PCa had LaN+ or M+ disease at diagnosis. The proportion of men with M+ disease at diagnosis decreased significantly over time, paralleled by an increase in median survival. Taken together, this indicates a lead-time effect on survival, which presently, however, is not substantial enough to result in a reduced PCa-specific mortality.

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