

RISK OF CANCER OF THE PROSTATE AND OF THE KIDNEY PARENCHYMA FOLLOWING BLADDER CANCER

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Aims and background: A registry-based cohort study of male patients with bladder cancer was conducted to determine the relative risk of second primary cancer of the prostate and kidney, the uni-/multivariate differences in relative risk according to patient characteristics, the cumulative risk by duration of the follow-up, and the prevalence:incidence ratio of prostate and kidney cancer cases detected in the first 6 months after the diagnosis of bladder cancer.

Methods: The complete case records of all male patients (n = 2025) diagnosed with bladder cancer between 1986 and 2002 were extracted from the database of the Romagna Cancer Registry: 1539 patients were eligible for analysis of the incidence of following prostate and kidney cancers, of the relative risk and the standardized incidence ratio specific for the time interval of follow-up.

Results: A total of 108 prostate cancer cases and 23 kidney cancer cases were observed during the follow-up. The relative

risk of second primary cancer of the prostate and kidney was respectively 3.52 (95% CI, 2.89-4.25) and 3.90 (95% CI, 2.47-5.85). The absolute excess risk was 11.8×1000 for prostate cancer and 2.5×1000 for kidney cancer. The number of prevalent cases of prostate and kidney cancer detected was approximately 10 times greater than the expected number based on incidence rates from the general population. During the follow-up, incidence of prostate cancer stabilized at a level that was 3- to 4-fold greater than that expected. Despite fluctuations, a decrease was also observed for incidence of kidney cancer.

Conclusions: In summary, our study showed the relatively constant high incidence of prostate and kidney cancers in bladder cancer patients over time. The possibility of subsequent cancer implies that an appropriate long surveillance is required. The pertinence depends on the duration of the follow-up as well as the degree of surveillance.

Key words: bladder cancer, incidence, second primary cancer.