Total Antioxidant Status in Men with Bladder Cancer

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ABSTRACT

Background and objectives: Extensive research and several experimental and practical works have elucidated the relation of oxidative stress markers and the reacting oxygen spaces (ROS) upon the inception and advancement of urinary bladder neoplasm.

Purpose of the study: To estimate the total antioxidant status, and oxidative stress (OS) in recently diagnosed patients with bladder cancer prior to surgical intervention.

Methods: In a case-control study, 24 patients recently diagnosed with urinary bladder cancer, prior to surgical intervention, and another 24 obviously healthful individuals, age correspondent as the patients, behold as a controlling series, participate in the study. Total antioxidant capacity (TAOC) and Malondyaldehyde (MDA), were calculated in both series.

Results: The TAOC level of the patient's group (6.43 ± 1.6) was considerably lower than that of the healthy group (11.2 ± 20) . MDA values of the patient's group $(9.6\pm1.7 \text{ nmol/l})$ were considerably more than that of the healthy series $(3.1\pm0.91\text{ nmol/l})$.

Conclusion: The actual work elucidated that bladder cancer patients have lower values of TAOC, and higher values of MDA in comparison with control series. This result may give a new insight into the fact that antioxidant therapy may have value in the management of bladder cancer.

Keywords: bladder cancer, Oxidative stress, Antioxidants.

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