A Prospective Study about the Detection Rate of Prostate Cancer in Patients with High Serum Prostate Specific Antigen in Consideration of Prostatic Inflammation and Antibiotics Treatment

Introduction and Objective: The prostatitis is often a reason in case with high level of prostate-specific antigen (PSA). Antibiotics have been used to exclude the prostatic inflammation. In consideration of this situation, no one can ever be absolutely sure to exclude the prostate cancer. We studied the detection rate of prostate cancer with the patients that had the high PSA and the positive finding of expressed prostate secretion (EPS) value after antibiotics treatment for 8 weeks.
Materials and Methods: The study is conducted based on 213 patients with more than PSA value 4ng/ml and the positive value on EPS from January, 2004 to December, 2010. The patients were treated with fluoroquinolone antibiotics during 8 weeks, and the prostate biopsies were carried out in all cases. The detection rate of prostate cancer was analyzed according to the change of PSA values after antibiotics treatment.
Results: Of the 213 patients studied, the one group (103 of 213) had still elevated serum PSA value more than 4ng/ml after antibiotics treatment. Fourteen of 103 (13.6%) patients were diagnosed with prostate cancer. The other group (110 of 213) had normalized PSA value after treatment. Four of 110 (3.6%) patients were diagnosed with prostate cancer (Figure). Total prostate cancer detection rate was 8.5% in our subjects.
Conclusions: In case that the PSA level is increasing, if we make a diagnosis to exclude firstly the prostatitis and serial diagnostic procedure, it reduces unnecessary prostatic biopsy and helps to establish more specific treatment algorithm.