

## DIAGNOSTIC VALUE OF SERUM PROSTATE-SPECIFIC ANTIGEN IN PATIENTS WITH POTENTIALLY CURABLE PROSTATIC CARCINOMA

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The aim of the paper was to analyze the age structure of patients in whom early diagnosis of prostatic carcinoma was performed. Diagnostic values of total PSA and age-specific PSA were compared.

One hundred patients (mean age 67 years) with the negative digital rectal examination and serum PSA levels 4 ng/ml-10 ng/ml were analyzed. In all patients trans-rectal ultrasound guided biopsy (12 biopsy cores) was performed. Serum PSA was measured in the control group as well. Control group consisted of 100 age-matched males (mean age 66), with the good overall health state -human blood donors, with the negative digital rectal examination and PSA levels below 4 ng/ml. Age-specific PSA was analyzed in both groups.

PSA was significantly different in patients with benign prostatic hyperplasia compared to the patients with prostatic carcinoma. There was no difference between the PSA and age-specific PSA. Sensitivity and specificity of the age-specific PSA referral range was 92.3% and 16.4%, respectively.

Principles of early detection of the prostatic carcinoma were not necessary in 38% of patients. They were not the target population for the early diagnosis of the prostatic carcinoma. Unnecessary prostate biopsies could be reduced up to 16%, using the age-specific PSA. Prostatic carcinoma would be missed in 7.6% of patients. False positive biopsy rate in patients within the referral range of the age specific PSA was 83.8%, so the question remains how the number of unnecessary prostate biopsies could be reduced. *Acta Medica Medianae 2017;56(1):5-8.*

**Key words:** antigen, prostate, specific