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PROSTATE SPECIFIC ANTIGEN (PSA) IN SERUM IN RELATION TO AGE, BODY MASS INDEX (BMI), SMOKING AND TERM OF EMPLOYMENT IN BUS DRIVERS

Background. To examine factors associated with PSA level in bus drivers.

Methods. Serum concentration of PSA was measured using a monoclonal two-site ELISA (DS-EIA-PSA-TOTAL). Spearman's Rank Correlation Coefficient was used for estimation of interrelationships.

Results. PSA level of 64 samples of serum from asymptomatic men working as bus drivers (Central Russia) have been measured.

The age of the workers varied between 26 to 70 years (mean age $47,8 \pm 9,8$ years). The term of employment was $25,4 \pm 9,7$ years. Mean PSA level was $1,17 \pm 1,12$ ng/ml (from 0,24 to 7,72 ng/ml). Out of 64 workers 35 (54,6%) had exceeded BMI (>25 kg/m²), 54 (84,3%) were smokers. Smoking experience varied between 7 to 60 years ($22,0 \pm 14,8$ years) and amount of cigarettes was from 10 to 40 per a day. A positive correlation was found between serum PSA levels and age ($R=0,27$, $p=0,032$) and the term of employment ($R=0,23$, $p=0,048$). There was no correlation between PSA level and other factors: BMI and smoking experience ($p>0,05$).

Conclusions. We conclude that only age strongly correlates with PSA level. Effects of other factors (body composition, social habits, occupational hazards etc.) need to be investigated more closely.

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