

MALE REPRODUCTIVE FUNCTION IN WORKERS EXPOSED TO VIBRATION

Al. Penkov¹, R. Stanislavov², D. Tzvetkov¹

¹Department of Hygiene, Ecology and Occupational Diseases

²Department of Obstetrics and Gynecology, Medical School, Sofia, Bulgaria

SUMMARY

Male infertility is a significant health problem. Increasing attention has been paid to the use of semen analysis as an indicator of exposure to potential reproductive hazards. The aim of the current paper was to study the effects of vibrations on the spermatogenesis in workers of different occupational groups (professional drivers, miners, engine drivers, etc.).

Semen samples were analyzed for pH, volume, turbidity, sperm density, sperm count and sperm morphology. Workers had an increased prevalence of oligospermia and azoospermia. The semen volume and percentage of motile spermatozoa decreased significantly and the incidence of sperm malformation increased in exposed workers.

Key words: vibration, spermatogenesis, male infertility

Address for correspondence: Al. Penkov, Department of Hygiene, Ecology and Occupational Diseases, 15 D. Nestorov, 1431 Sofia, Bulgaria