
SHC 44 . OCCUPATIONAL EXPOSURE TO ARSENIC IN TURKEY: AN EVALUTION FROM LEGAL AND TOXICOGENETIC PERSPECTIVE

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Chronic arsenic exposure can cause many diseases such as hyperpigmentation, diabetes mellitus and cancer. In Turkey, prevention of occupational diseases and protection of the employees' rights, health and safety has become important after Occupational Health and Safety Law No. 6331. Thereunder, workers have to use personal protective equipment in their work places, occupational environment has to be controlled routinely. Arsenic level of ambient air has to be evaluated permanently and routinely employees have to go through medical examinations. Besides all these, single nucleotide polymorphisms (SNPs) can affect the susceptibility to arsenic related diseases by changing protein expression which takes part in arsenic toxicokinetics. Our previous researches showed that SNPs in GLUT1, GSTP1, MRP1 and MRP2 genes cause individual susceptibility. However, these polymorphisms are not within the scope of law. In this presentation, the results of our toxicogenetic researches in case of chronic arsenic exposure and the workers' rights will be mentioned in accordance with the law.

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