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**The Analysis of Chromosome Aberration in Workers Exposed to Low Level Benzene.**

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Human exposure to benzene is derived occupationally from the petrochemical and petroleum refining industries.

This study was carried out to find whether the frequencies of chromosome aberrations in workers exposed to low level benzene in a petroleum factory were elevated compared to non-exposed workers. The study population was comprise of 177 exposed workers and 45 non exposed workers.

The frequencies of chromatid deletions and total chromosome aberrations in workers exposed to benzene were significantly higher compared to non-exposed workers. The frequencies of chromosome aberrations in the exposed group were significant increased according to the duration of work. There was statistically significant association between the frequencies of chromosome aberrations and low white blood cells counts. The frequency of total chromosome aberrations were significantly associated with benzene concentration after adjusting confounding variables such as age, smoking, alcohol intake, duration of work.

**Keyword** : Benzene, Chromosome aberration, White blood cell counts.