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Analysis of Cytogenetic Effects of Radiation in Dental Personnel Exposed to Diagnostic X-rays

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ABSTRACT The incidence of chromosomal aberrations were evaluated in the lymphocytes of peripheral blood of 40 persons working in different dental colleges and clinics in and around Bangalore occupationally exposed to X-rays. The age range of the study group was 25-65yrs and duration of exposure of dental personnel ranged from 5-35yrs. For comparison blood samples were also collected from 20 subjects (controls) who were not exposed to any diagnostic radiations. The radiographers showed a significant increase of chromosomal aberrations (mean of 1.00) when compared to controls (mean of 0.50). Though dental personnel showed increase in frequency of chromosomal aberrations but the results were not statistically significant. Frequency of chromosomal aberrations was also compared on bases of age, gender and duration of exposure, results were not statistically significant.