Cytogenetic evaluation of cataract patients occupationally exposed to ionizing radiation in northeast China

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Dear Editor,

With great interest, we have read the article by Zhou et al. (2016) entitled “Cytogenetic evaluation of cataract patients occupationally exposed to ionizing radiation in northeast China”, which is published in Genetics and Molecular Research 15 (3): gmr.15038687. Zhou et al. (2016) in their article investigated the association between chromosomal aberrations in cataract patients and occupational exposure to ionizing radiation in the Chinese population. Despite its challenging theme, the paper authored by Zhou et al. (2016) has a basic shortcoming. In this report, the authors have reported that chronic occupational exposure to ionizing radiation had a significant correlation with cataract development in the Chinese population. The main shortcoming of this study comes from this point that the authors have not measured the effective annual dose received by the radiation workers participated in their study. It is worth noting that the effective annual dose received by radiation workers strongly depends on...
key factors such as if they are involved in interventional radiology. In this light, when the magnitude of the occupational exposure is not clearly known, tracking the role of radiation in any biological effect will be hard or even impossible (Mortazavi, 2015; Mortazavi and Jooyan, 2015). These researchers have not even reported the proportion of the diagnostic workers who were involved in interventional radiology (fluoroscopic) procedures, which normally cause significantly higher levels of exposures. It should be noted that some challenging studies have revealed that the effective dose for 91% of radiation workers was lower than if they had stayed at home (Kemerink et al., 2011). In this light, we strongly believe that the results obtained in this study are significantly affected by factors other than occupational exposures.

REFERENCES


