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# Preliminary Study of Standardization and Validation of Micronuclei Technique to Assess the DNA Damages Cause for the X-Rays

**Authors :** L. J. Díaz, M. A. Hernández, A. K. Molina, A. Bermúdez, C. Crane, V. M. Pabón

**Abstract :** One of the most important biological indicators that show the exposure to the radiation is the micronuclei (MN). This technique is using to determinate the radiation effects in blood cultures as a biological control and a complement to the physics dosimetry. In Colombia the necessity to apply this analysis has emerged due to the current biological indicator most used is the chromosomal aberrations (CA), that is why it is essential the MN technique's standardization and validation to have enough tools to improve the radioprotection topic in the country. Besides, this technique will be applied on the construction of a dose-response curve, that allow measure an approximately dose to irradiated people according to MN frequency found. Inside the steps that carried out to accomplish the standardization and validation is the statistic analysis from the lectures of "in vitro" peripheral blood cultures with different analysts, also it was determinate the best culture medium and conditions for the MN can be detected easily.

**Keywords :** micronuclei, radioprotection, standardization, validation
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