

International Atomic Energy Agency and SOLACI

RELID survey. August 2010. Buenos Aires - Argentina.

Advancement of the results

At the XVI Congress of the Latin American Society of Interventional Cardiology (SOLACI 2010) and the XX Congress of the Argentine College of Interventional Cardioangiologists, held in Buenos Aires from August 11th through August 13th 2010, a new RELID (Retrospective Evaluation of Lens Injuries and Dose) survey was carried out under the auspices of the IAEA (International Atomic Energy Agency).

The survey was organized by Dr. Ariel Duran (SOLACI) and made by a team of local ophthalmologists including Prof. Dr. Carlos Nicoli, Dr. Manuel Nicoli, Prof. Dr. Jorge Bar and Dr. Diego Bar and was coordinated by Dr. Mariana Romano Miller under the guidance of the IAEA experts Dr. Norman Kleiman (Columbia University, USA) and Prof. Eliseo Vano (Complutense University, Spain).

The study consisted of a comprehensive dilated slit lamp examination to evaluate posterior lens changes in a group of volunteers attending the conference as well as completion of a detailed written questionnaire concerning occupational radiation exposure, workplace practices and medical history. A total of 131 individuals: 52 interventional cardiologists, 4 endovascular surgeons and 65 nurses or technicians from hemodynamic rooms were included in the cohort. Ten individuals were excluded because of confounding factors discovered after completing the questionnaire. Roughly 20% of the participants also completed a contrast sensitivity test designed to directly measure visual function.

52% of interventional cardiologists and 42% of nurses/technicians had posterior subcapsular lens changes of a type consistent with and characteristic of ionizing radiation exposure. Similar changes were found in only 10-12% of individuals in control groups of previous RELID surveys.

These are preliminary results, since some information from questionnaires is still being analyzed and clarified. Results of the present study are consistent with previous RELID surveys. The high rate of presumptive ionizing radiation induced lens injuries in the population of interventional cardiologists and nurses/technicians emphasizes the urgent need to continue to take measures to increase the use of appropriate radiation protection devices and strengthen training programmes in radiation protection.

Vienna, August 17, 2010