



Retrospective Evaluation of Lens Injuries and Dose · RELID

Present Achievements (SOLACI – IAEA)

At the VI Regional Congress of the Latin American Society of Interventional Cardiology - SOLACI (2nd of the Andean Region, and V Congress of the Colombian College of Hemodynamics), held in Bogotá, Colombia, on 25 and 26 September 2008, it was decided to begin a study of Retrospective Evaluation of Lens Injuries and Dose (RELID).

This study was sponsored by SOLACI and the International Atomic Energy Agency (IAEA), and took place with the participation of the following experts: Colombian ophthalmologists (Drs. Guillermo Durán and Mariana Cabrera), United States ophthalmologist and specialist in ocular injuries produced by radiation (Dr. Norman Kleiman), medical physics (Prof. Eliseo Vañó), Technical Officer of the IAEA (Mr. Raúl Ramírez) and SOLACI cardiologists (Drs. Ariel Durán and Darío Echeverri).

The study included asking the participants to complete a questionnaire about various kinds of personal and occupational data, such as medical history, duration of time spent on the job, work load, radiological equipment used, radiation protection utilized and usage frequency.

A total of 42 interventional cardiologists and 34 nurses or technicians from hemodynamic rooms voluntarily participated, and the results were compared with a control group assessed a short time later in Bogotá by one of the ophthalmologists, which was comprised of 42 non-medical professionals not exposed to ionizing radiation.

Of the 42 interventional cardiologists, 17 (40.4%) had posterior subcapsular opacities which, although not exclusively due to radiation exposure, are consistent with and characteristic of such injury. It was highlighted that 10 of the 17 cardiologists (58%) had bilateral injuries, 12 of 17 (70%) did not use leaded protective lenses, and 13 of 17 (76%) had not used suspended leaded screens.

In contrast, 3/34 room nurses or technicians had posterior subcapsular opacities (9%). In the control group, subcapsular opacities were observed in 4 of 42 people (9.5%).

These are preliminary results, since some information from questionnaires is still being clarified, and further refinement of the cardiologists and control groups is ongoing, based on their responses to the questionnaires, and taking into account other co-factors and ocular morbidities.

This study will be continued during the VII SOLACI Congress - 3rd in the Southern Region, which will be held in Montevideo, Uruguay, on 16 and April 17, 2009. It is expected to increase the 3 groups and thus to achieve more representative results.

The high rate of radiation lens injuries in the population of interventional cardiologists makes it imperative for our Scientific Societies to take measures to increase the use of appropriate elements for radiation protection and strengthen training programmes in radiation protection.

By the same token, it is necessary to obtain the commitment of the national regulatory authorities to include such recommendations in the regulatory frameworks on medical exposure control.

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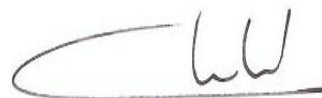
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