

RISK OF CATARACTS IN MEDICAL STAFF EXPOSED TO IONIZING RADIATIONS: FOCUS ON INTERVENTIONAL CARDIOLOGISTS IN THE O'CLOC STUDY

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Background and aims: Interventional cardiologists are exposed to ionizing radiations which may induce radiation-induced cataracts. To test the existence of an increased risk of cataracts among interventional cardiologists compared with unexposed workers, the O'CLOC study (Occupational Cataracts and Lens Opacities in interventional Cardiology) was performed in France.

Methods: O'CLOC study includes an exposed group of interventional cardiologists and a comparable unexposed group (including non interventional cardiologists and unexposed French workers). Individual risk factors of cataracts (age, diabetes, myopia, ...), were collected during a telephone interview. For the exposed group, in order to assess exposure level, a specific part of the questionnaire focused on their interventional practice (description of type of procedures, frequency, use of radiation protection tools). All participants underwent a clinical eye examination. The use of the international standard lens opacities classification – LOCS III, allowed detecting cataracts even at the early stages and for different localisation (nuclear, cortical or posterior subcapsular).

Results: Preliminary results were based on 92 interventional cardiologists, and 70 unexposed individuals. Mean age was 51.9 ± 7.3 years in the exposed group and 51.8 ± 7.5 years in the control group. Some posterior subcapsular lens opacities, known as radiation-induced eye lens damages, were observed in the exposed group and have to be analyzed more precisely. Complete analyses will be based on more than 200 individuals and final results will be presented during the congress.

Conclusion: The O'CLOC study is the largest study ever performed on lens opacities among interventional cardiologists. Preliminary results need further analyses, in particular to consider the level of exposure and means of protection against X-rays used by cardiologists.