IAEA Cataract studies published

IAEA studies on Retrospective Evaluation of Lens Injuries and Dose (RELID) that were started in 2008 covering staff working in interventional cardiology have reached the stage of publication in reputed journals. The study involving testing of eyes of interventional cardiologists and nurses as organized by the IAEA in cooperation with National Heart Association of Malaysia (NHAM) and conducted in April 2009 has just been published in Catheterization and Cardiovascular Interventions [CIRAJ-BJELAC, O., et al., 2010]

Another study organized by the IAEA in cooperation with Latin American Society of Interventional Cardiology (SOLACI) and conduced in Bogota, Colombia in Sept.2008 and in Montevideo, Uruguay in April 2009 has been published in Radiation Research. [VANO, E., 2010].

These are the first published reports of cataract among this group, that is, staff in interventional cardiology. A review of findings in other groups is <u>available at »</u>

These findings demonstrate a dose dependent increased risk of posterior lens opacities for interventional cardiologists and nurses when radiation protection tools are not used. While study of a larger cohort is needed to confirm these findings, the results suggest ocular radio-protection should be utilized and indicate an urgent need to educate professionals in radiation protection to reduce the likelihood of cataract.

<u>CIRAJ-BJELAC O, REHANI MM. Eye dosimetry in interventional radiology and</u> <u>cardiology: current challenges and practical considerations. Radiat Prot Dosimetry (20 Nov</u> <u>2013)</u>

VANO E, KLEIMAN NJ, DURAN A, ROMANO-MILLER M, REHANI MM. Radiationassociated lens opacities in catheterization personnel: Results of a survey and direct assessments. J Vasc Interv Radiol. 24 2 (Feb 2013) 197-204. doi: 10.1016/j.jvir.2012.10.016. Epub 2013 Jan 28.

ANTIC V, CIRAJ BJELAC O, REHANI M M, ALEKSANDRIC S, ARANDJIC D, OSTOJIC M. Eye lens dosimetry in interventional cardiology: results of staff dose measurements and link to patent dose levels. Rad Protec Dosimetry (14 Nov 2012)

<u>CIRAJ-BJELAC O, REHANI M, MINAMOTO A, SIM KH, LIEW HB, VANO E. Radiation</u> induced eye lens changes and risk for cataract in interventional cardiology. Cardiology 123 3 (31 Oct 2012)168-171.

REHANI, M.M., VANO, E., CIRAJ-BJELAC, O., KLEIMAN, N.J., Radiation and Cataract, Radiat. Prot. Dosimetry (Jul. 2011)

CIRAJ-BJELAC, O., REHANI, M.M., SIM, K.H., LIEW, H.B., VANO, E., KLEIMAN, N.J., Risk for radiation induced cataract for staff in interventional cardiology: Is there reason for concern? Catheter. Cardiovasc. Interv. (Jun. 2010) VANO, E., KLEIMAN, N.J., DURAN, A., REHANI, M.M., ECHEVERRI, D., CABRERA, M., Radiation Cataract Risk in Interventional Cardiology Personnel. Radiat. Res. (Jun. 2010)