

NR180-ED-X

Occupational Radiation Exposure of the Eye in Neurovascular Interventional Physician

All Day Room: NA Digital Education Exhibit

Awards

Certificate of Merit

Participants

Mamoru Kato, PhD, Akita, Japan (*Presenter*) Nothing to Disclose
Koichi Chida, PhD, Sendai, Japan (*Abstract Co-Author*) Nothing to Disclose
Toshibumi Kinoshita, MD, PhD, Akita, Japan (*Abstract Co-Author*) Nothing to Disclose
Hideoto Toyoshima, BSc, Akita, Japan (*Abstract Co-Author*) Nothing to Disclose
Noriyuki Takahashi, Akita, Japan (*Abstract Co-Author*) Nothing to Disclose
Tomomi Omura, Akita, Japan (*Abstract Co-Author*) Nothing to Disclose

For information about this presentation, contact:

kato-amc@med.tohoku.ac.jp

TEACHING POINTS

To understand the importance of correct an equivalent dose limit for the lens of the eye of 20 mSv/year To understand the importance of radiation protection of the eye lens of neurovascular interventional physician To emphasize the usefulness of a direct eye dosimeter for correct measurement of the occupational dose in a clinical neurovascular interventional radiology (Neuro-IR) setting

TABLE OF CONTENTS/OUTLINE

Evaluation of eye dose of neurovascular interventional physician and related factors in Neuro-IR procedures Occupational radiation exposure (eye doses) of two neurovascular interventional physicians were measured using the direct eye dosimeters (DOSIRIS) and the personal dosimeters (neck badge). *Reducing the radiation exposure eye dose* Understand the usefulness of using lead eye glasses protecting eyes from scattered radiation. Summary: Incidences of radiation-induced depilation and skin injuries have been reported because Neuro-IR procedures tend to require an extended fluoroscopic exposure time and repeated digital subtraction angiography. Thus, it is important to measure the radiation dose in the eye for Neuro-IR physicians. The eye doses evaluated using a neck badge tended to be overestimated. For this reason, occupational eye doses of Neuro-IR physicians should measure with DOSIRIS.