

## Postgraduate Educational Programme

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RC 1614 - Sat, March 5, 16:00 - 17:30, D2

### **Safety issues in medical imaging**

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(Only your selected presentations of this session are included)

#### **A-709**

##### **B. Safety aspects in an interventional radiology setting?**

D. Catania; Milan/IT

In the USA National Commission on Radiological Protection (NCRP) Report 160 (2006) radiation exposure was reported as 50 % due to background radiation and 48 % due to medical therapies. Despite the fact that interventional radiological procedures accounted for only 4 % of all medical radiation exposure, they contributed 14 % of the overall cumulative dosage. In more recent years interventional procedures are more routinely performed due to reduced mortality rates compared to patient management involving open surgery. However, as complexity of procedures increases this potentially impacts upon radiation risks for patients and operators. Specific procedures are known as potentially high-dose examinations due to their complexity, or if performed on paediatrics. The international literature demonstrates that the operators working in radiology interventional suites are exposed to chronic low doses of radiation; therefore, if adequate protection is not utilised, there is an increased probability of developing cancer. The radiation dose obtained by both patient and operator can be decreased considerably, by optimising the imaging parameters with additional proper use of radiation protection measures. Highly trained professionals who understand radiation risk implications will support optimal quality in terms of execution of procedural examination. The importance of correct dose management, to include diagnostic reference level (DRL) establishment and dose data archiving for audit all form important aspects of safety management. These factors will be outlined in addition to other aspects of safe clinical management in the interventional suite. Relevant guidelines and directives related to these safety issues will be discussed.

##### **Learning Objectives**

1. To become aware of patient and staff risk in an interventional radiology setting.
2. To appreciate the importance of radiation protection measures considering the nature of interventional procedures.
3. To recognise the need for education and training in interventional radiology settings in order to promote radiation safety.

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## My personal abstract book - Author Index

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