

NSRT Annual Conference – 2019

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Title: Discussing Radiation Risk with Patients: Facts vs. Fiction

Ongoing increased attention to the risk of health detriment from medical radiation exposure is a benefit to patients and practitioners alike. Often it is the radiographer who bears the responsibility of discussing radiation risk with patients. During this session, we will review many of the current empirically supported theories and concepts of radiation dose and risk, so that the imaging professional may sensibly and effectively communicate with patients on this issue.

Objectives

Upon completion of this session the attendee will be able to:

1. Discuss the current landscape of radiographic utilization, including specific procedure and dose level statistics.
2. Appreciate the patient perspective of the potential danger of medical radiation exposure as portrayed by U.S. and global media.
3. Interpret various dose metrics including effective dose and diagnostic reference level.
4. Assess the estimated risk of patient exposure to medical radiation described within the scientific literature.
5. Use comparisons of a procedure's effective dose to average background radiation dose when discussing radiation risk.
6. Educate patients on the potential risk of a given x-ray procedure utilizing non-technical language.

Outline

1. Introduction
 - a. Potential over-use of radiographic imaging.
 - b. Media coverage and increasing public concern.
 - c. Our profession's response to radiation dose/risk.
2. Issues of Radiation Dose/Risk
 - a. Dose measurements – terms, units, and definitions.
 - b. Effective dose as a whole body dose.
 - c. Limitations of dose/risk estimates.
 - d. Relative risk.
3. Communicating Risk to Patients
 - a. The risk vs. benefit continuum.
 - b. Risk comparisons.
 - c. BERT – Background Equivalent Radiation Time.
 - d. Empirically supported best practices for patient communication.