



IAEA Free Webinar

An overview of risks and strategies for multi-modality optimization

Date: **9 May 2017, 3 pm CET ([check time in your country](#))**
Presenter: **Prof. Kevin Hill, Duke University Medical Center, Durham, USA**

Organized jointly with the Alliance for Radiation Safety in Pediatric Imaging (the Image Gently Alliance)

Children with congenital and acquired heart disease represent a high morbidity patient population. As a consequence of their complex diseases and conditions, some of these children can be exposed to a relatively high cumulative ionizing radiation burden from invasive fluoroscopically guided procedures such as cardiac catheterization and electrophysiology procedures, from computed tomography scans, from nuclear medicine studies, and from other medical imaging sources. Optimization of these studies is critically important so as to minimize radiation exposure without compromising diagnostic quality or procedural safety/efficacy. This webinar will review epidemiologic aspects of radiation exposure in children with congenital and acquired heart diseases including sources of exposure and estimates of the cumulative burden to these children. We will then discuss ways to optimize imaging procedures so as to minimize radiation exposure without compromising procedural integrity in keeping with the “As Low as Reasonably Achievable” (ALARA) concept.

Learning objectives

1. To understand major sources of cumulative ionizing radiation exposure in children with congenital and acquired heart disease.
2. To recognize potential risks associated with ionizing radiation exposure in children with congenital and acquired heart disease
3. To recognize, understand and be able to implement strategies to optimize medical imaging procedures associated with ionizing radiation exposure in children with congenital and acquired heart disease including fluoroscopically guided procedures, computed tomography and Nuclear Medicine studies.

Presenter



Dr. Kevin Hill is an Associate Professor of Pediatrics in the Division of Pediatric Cardiology at Duke University Medical Center. He is an interventional cardiologist with a research interest in radiation safety in children with heart disease. His published works have evaluated the epidemiology of medical imaging ionizing radiation exposure in children with congenital and acquired heart disease, and ways to reduce radiation exposure in keeping with the ALARA concept. He is currently leading the Image Gently “Have-A-Heart” campaign including several pending consensus papers focused on multi-modality imaging optimization.