Paediatric personnel extremity dose study.

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Source: Br J Radiol. 2002 Mar;75(891):249-52
Date: Mar-2002
Language: English
Publication Type: Article
Keywords: Child
Fluoroscopy
Humans
Manitoba
Occupational Exposure - analysis
Pediatrics - manpower
Personnel, Hospital
Radiation Dosage
Radiometry
Technology, Radiologic - manpower
Thermoluminescent Dosimetry
Tomography, X-Ray Computed

Abstract: Concern has been expressed in paediatric radiology regarding the magnitude of the extremity dose received by attending personnel during routine fluoroscopic procedures and CT. Common procedures that may be of short duration in adults can be quite the opposite in paediatric patients. The extremities of attending personnel are more likely to be exposed to the primary beam and for a longer period of time owing to a variety of reasons such as assisting in the procedure or physically restraining the patient during the examination. During the period mid 1998 to mid 2000, two paediatric radiologists, four senior radiographers and two paediatric nurses were monitored using ring thermoluminescent dosemeters (TLDs). Each participant wore the ring TLD on either the left or right ring finger, depending on which hand the individual favoured. Left/right asymmetrical studies were not conducted, nor were records kept of whether an examination used a grid or gridless technique. Initial apprehension about higher paediatric fluoroscopic and CT extremity doses was dispelled as a result of this quantitative dosimetric study.

PubMed ID: 11932219 View in PubMed