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Radiation Protection Dosimetry

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Local diagnostic reference levels for some common diagnostic X-ray examinations in Tehran county of Iran

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Abstract

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Various researchers who have carried out national and international surveys have reported wide variations in patient dose arising from specific X-ray examinations. This study was carried out as a part of a comprehensive project to establish national diagnostic reference level (NDRL), for the first time, in Iran. Seven most common X-ray examinations in 11 projections were included. Thermo luminescence dosimeters (TLD-100) were used to measure entrance surface doses (ESDs). The study group consisted of 535 patients who were referred for X-ray examinations to 12 randomly selected public hospitals in Tehran County. Minimum, median, mean, maximum, first and third quartile values of ESDs are reported. Our results are evident that mean dose values of patients undertaking a specific examination are widely different in various hospitals. Wide dose differences may emerge from complex causes, but in general, low peak kilovoltage and high milli Amperes are associated with higher doses. The results of this work together with further data expected to emerge from the work in progress will provide a useful base to establish Iran's DRLs. © The Author 2007. Published by Oxford University Press. All rights reserved.

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Indexed Keywords

EMTREE medical terms: abdominal radiography; adolescent; adult; aged; article; cervical spine radiography; controlled study; diagnostic imaging; diagnostic value; dosimetry; human; lumbar spine; major clinical study; patient referral; pelvis radiography; public hospital; radiation exposure; reference value; skull radiography; spine radiography; thermoluminescence dosimeter; thoracic spine; X ray analysis

MeSH: Body Burden; Humans; Iran; Patients; Radiography; Radiometry; Reference Values; Relative Biological Effectiveness

Medline is the source for the MeSH terms of this document.

Device tradename: DXD-525, General Electric, Geneius 750, Villa Medical Systems, Geneius 7503, Villa Medical Systems, HFG Series, Arian, MSI 1250 IV, General Electric, PMX-600, Parspad, Polyphos 300E, Siemens, Polyphos 50, Siemens, R20, Shimadzu.

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- (2000) Report to the general assembly with scientific annexes United Nation Scientific Committee on the effects of Atomic Radiation, New York

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