

عنوان مقاله:

Efficacy of Increasing Focus to Film Distance (FFD) for Patient's Dose and Image Quality in Pediatric Chest Radiography

محل انتشار:

مجله بین المللی کودکان, دوره 4, شماره 9 (سال: 1395)

تعداد صفحات اصل مقاله: 9

نویسندگان:

Vahid Karami - *Department of Medical Physics, School of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran*

Mansour Zabihzadeh - *Department of Medical Physics, School of Medicine, Student Research Committee, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran. Department of Clinical Oncology, Golestan Hospital, Ahvaz, Jundishapur University of Medical Sciences*

Amir Danyaei - *Department of Medical Physics, School of Medicine, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran*

Nasim Shams - *Department of Oral and Maxillofacial Radiology, School of Dentistry, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran*

خلاصه مقاله:

Background: Increasing the x-ray focus to film distance (FFD) has been advocated as an effective method to reduce the patients' radiation dose. The aim of this study was to investigate the efficacy of this technique in patients dose and image quality in pediatric chest x-ray. **Material and methods:** Sixty pediatric patients were x-ray imaged at FFDs of 100 and 130 cm. Dose measurements were performed using thermo-luminescent dosimeters (GR200). The quality of images was independently assessed using the anatomical criteria recommended by the European guidelines. **Results:** Increasing the FFD from 100 to 130 cm has reduced the entrance skin dose (ESD) of patients by 32.2% ($p < 0.05$). **Conclusion:** Increased FFD to 130 cm reduce the pediatric radiation dose with no significant changes in image quality.

کلمات کلیدی:

Chest radiography, Focus to film distance (FFD), Pediatric, Radiation Protection

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