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Assessment of Breast, Lung and Liver Effective Doses in Heart Imaging by CT-Scan 128 Dual Sources with Use of TLD-100 in RANDO Phantom

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Abstract : CT-Scan is one of the lateral and sectional imaging methods that produce 3D-images with use of rotational x-ray tube around central axis. This study is about evaluation and calculation of effective doses around heart organs such as breast, lung and liver with CT-Scan 128 dual sources with TLD_100 and RANDO Phantom by spiral, flash and conventional protocols. In results, it is showed that in spiral protocol organs have maximum effective dose and minimum in flash protocol. Thus flash protocol advised for children and risk persons.

Keywords : X-ray computed tomography, dosimetry, TLD-100, RANDO, phantom
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