Radiation Exposure during Diagnosis by Mammography

Eman M. Al-Hilo
College of Medicine, University of Kufa, Kufa, Iraq

Abstract
A total of (110) woman in Najaf city was diagnostic by Mammography in Al-Sadder Teaching Hospital. The measurements of (kVp, mAs, mR/h) were taken against thickness of left & right breast at craniocandell position (cc) & Mediolateral position (ML), then divided into six gropes according to the thickness.

It is found that the voltage (kVp) increased slightly with thickness of breast. But the average of (kVp/cm) is decreased with thickness.

The exposure (mAs) increases rapidly with thickness of breast, but the variation of (mAs/cm) with thickness is very small.

The rate of exposure (mR/h) increases also with thickness. The average of exposure rate with thickness is increased for left & right breast at CC & ML position.

In general the total average exposure rate that received by patient during mammography is more than the exposure rate limit for the whole body for general public by (8.9%) & (7.6%) for left & right breast respectively at CC position and about (7.1%) & (11.43%) for left & right breast respectively at ML position.