

Computerized Tomography is the most important diagnostic equipment with the feature of high accuracy , short duration and non-invasive approach. Meanwhile , the unavoidable production of the ionization radiation also contributes to the risk of radiation damage. Careful dose monitoring of the patients should be carried on when we perform the CT scans on the patients. In this study , the criteria of comparing the absorbed dose of the Rando phantom in the conventional CT (GE-9800Q) and spiral CT (GE Hi-Speed Adv.) is based on the same image quality , allowing different settings of kV and mAs . After detailed measurements of TLD , the doses of the primary regions in spiral CT can be lowered 39.5% - 48.8% of those in 9800Q CT . And there are no evident differences in the non-primary regions (due to air scattering).