CT Shielding Design

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Shearer et al (1992*) suggested a technique to estimate shielding requirements for CT scanners. This technique was based on use of the manufacturer's Computerized Tomographic Dose Index (CTDI) and the standard FDA dosimetry phantoms. This established a uniform method for estimating radiation levels surrounding the CT scanner.

This presentation extends the previous work by comparing the relationship between the stray radiation levels and the published and measured CTDI's for the majority of commercially available CT scanners.

A data base program has been developed to estimate shielding requirements for CT scanners. Different workloads and a variable mix of head and body techniques will be used to illustrate their effect on CT shielding requirements.

*Radiation Shielding for CT Facilities <u>Medical Physics</u>, Vol.19, Number 3 (1992)