Radiation dose reduction: strategies at an academic medical center

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I. CT Low Dose Protocols

Cat Scans (CT) are very useful diagnostic tools, however the dose from a CT is much higher than from an X-ray. The number of CTs performed in medical settings is rising exponentially. Low dose protocols must be used for adults and pediatric patients.

II. Right Exam, Right Patient, Right Dose

One size does not fit all......

There's no question - CT helps us save lives! But, what we image, radiation matters. *Children are more sensitive to radiation *What we do now, lasts their lifetimes So, when we image, let's image gently, handle it with care *Children are more sensitive to radiation *Child dose the half of an adult *Limit whole body exams *Gently image the area

III. Fluoroscopy

Extended fluoroscopy times can lead to high skin dose and skin injury. Collimation, short taps of pedal, reduced frame rates - all lowers dosage. The dose is monitored and the patients are seen in follow-up for skin changes.

IV. Decision Support and IT Solutions

When a CT scan is ordered electronically the entire Lifespan network (RIH, Miriam, & Newport) is searched to prevent duplicate orders, thereby decreasing radiation exposure. An alert pops up with the number of CTs performed for the individual patient.

V. Credentialing

Physicians who administer fluoroscopy are required to be credentialed by passing an on-line course.

VI. Conclusion

RIH has reduced the overall dose delivered to patients with lower than average values in the Dose Registry Index, lower PET-CT doses, and lower fluoroscopy doses.

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