New Protocol for Checking Feeding Tube Placement Lowers Radiation Dose

A University of Chicago study published in Academic Radiology showed that using a patient's body mass index when checking feeding tube placement can lower radiation exposure by 80%.

The authors described the new protocol's image-acquisition parameters as based on the patient's 'thickness'. This thickness was calculated by accounting for differences in body mass index, ventilator status, and the x-ray source's distance from the patient and the detector. A total of 226 pre-intervention radiographs served as a baseline dataset to develop the thickness protocol. The new protocol was then run on 229 patients for intervention. Of these, 93 patients could be considered small, 117 medium, 16 large, and three extra-large. About 83 patients were on ventilators. In comparison, only 53 in the baseline dataset required ventilators.

Seven radiologists evaluated the diagnostic quality on a standardized conspicuity scale and found no significant difference in diagnostic quality between the baseline and international datasets. However, implementing the new protocol reduced radiation exposure by 80%. Thus, the new protocol can lower patient radiation doses without sacrificing diagnostic accuracy.

Source: Academic Radiology

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