
New study: ICU Overuses X-Rays, Should Favour Safer Ultrasound



According to a new study presented at this year's annual meeting of the American College of Chest Physicians (ACCP) it appears that X-rays and CT scans are overused in the ICU despite the fact that ultrasound testing decreases patient radiation exposure and reduces costs of care.

Margarita Oks, MD, Long Island Jewish Hospital, North Shore-LIJ Health System, participated in the study and shares the group's findings: "The use of diagnostic ultrasound greatly reduced radiation exposure for patients without negatively affecting their health." Oks further confirms that this technology also proved cost-effective.

Ultrasound is an imaging technology which utilises high-frequency sound waves to create images that guide diagnosis and treatment for a number of diseases and medical conditions. Also called sonography, ultrasound does not use radiation, whereas the patient is exposed to active rays when examined via x-rays and CT scans.

The researchers studied medical charts covering three months of data compiled by two independent but similar medical intensive care units. These ICUs were staffed by the same medical house team present in one health-care system. One unit had bedside ultrasound as the standard of care for diagnosis, and the second used conventional imaging, such as x-rays and CT scans as a diagnostic tool.

The comparison between chest x-rays, CT scans, and ultrasound described in the report shows that there were five times more x-rays done per patient stay in the ICU using x-rays and CT scans, while there was 1.10 x-ray ordered per patient stay in the unit using ultrasound as the standard of care.

When studying patients' mortality rates it was found that these values did not differ greatly, with 0.27 in the nonultrasound ICU vs 0.20 in the ultrasound ICU.

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