

Review of: "Dose Reduction in Medical Radiography: Advancing Veterinary Diagnostic Solutions"

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Potential competing interests: No potential competing interests to declare.

The authors of the study investigated the issue of photon loss caused by the anti-scatter lead grid in X-ray imaging. They employed a linear array X-ray detector as a solution to mitigate this photon loss. Through their experiments, they observed an increase in photon loss when using the traditional flat panel detector system with the lead grid, especially as the thickness of the phantoms used in testing was increased.

This increase in photon loss due to the lead grid can be problematic in some contexts, but the researchers identified a unique advantage for veterinary radiography. In veterinary settings, where different animal sizes and varying anatomical structures are common, the ability to control and manage photon loss more effectively can lead to better imaging results and potentially lower doses of radiation for animal patients.

Additionally, the researchers noted the magnification capabilities of the linear array detector, which could offer enhanced imaging details that are particularly useful in diagnostics. This study stands out as a successful example of multidisciplinary research, integrating principles from physics to medical science and extending its application to veterinary X-ray diagnostics. The findings highlight the potential for improved imaging techniques and better diagnostic outcomes across multiple fields.

The paper deserves to be published.