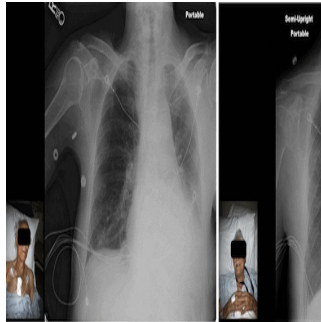

Integrating Patient Photos with Imaging Exams



A recent article describes a system for including patient photographs alongside their medical imaging examinations. The authors discuss a specific implementation built around an Android-based system for simultaneously acquiring digital photographs with portable radiographs.

By an innovative application of radiofrequency identification technology the technique uses digital facial photography at the point-of-care of medical image acquisition and integrates this data with the imaging data. The method can be applied to all imaging modalities including X-ray, CT, MRI, ultrasound and PET. The authors suggest that their concept can be used at many point-of-care data collection points leading to a more robust patient identification and authentication function in integrated healthcare information systems.

Several research questions must be addressed before integrated photography with medical imaging can become a clinically acceptable and useful tool. The camera should be positioned automatically to take the facial photographs. Intelligent face tracking cameras are already commonly available; systems that can be trained to obtain images of other body parts need to be designed. Face recognition systems may further help interpreters quickly identify wrong patient errors.

The authors suggest that perhaps the biggest challenge is to evaluate the clinical impact of adding patient photographs. While these photographs may help with identification, they may lead to unintended consequences: (1) photographs may distract the reader and impair reader efficiency; (2) photographs may provide conflicting information relative to the medical images and confuse the interpreter; and (3) the interpretations may become more subjective.

Reference:

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Integrating Patient Digital Photographs with Medical Imaging Examinations. Senthil Ramamurthy, Pamela Bhatti, Chesnal D. Arepalli, Mohamed Salama, James M. Provenzale and Srini Tridandapani.

<http://link.springer.com/article/10.1007/s10278-013-9579-6/fulltext.html>

Image courtesy American Journal of Roentgenology

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