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LETTER

Chest X-Ray Assessment is Incomplete without the Lateral View [Letter]

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Dear editor

The article by Sait and Tombs[1] represents an important contribution to the preparation of students for a career in medicine. The perhaps not so subliminal message is that clinicians (eg, primary care and specialty providers) need to routinely examine and be able to interpret primary data (eg, x-rays), not just rely upon another physician's (eg, radiologist's) report. No one bats 100%, so additional assessments are not only quite reasonable, but essential. The clinician has an advantage because he or she has pertinent clinical information (often not fully shared with the radiologist) and the x-ray is part of a targeted diagnostic evaluation. The radiologist is also advantaged because he/she pursues systematic x-ray reviews, with less distraction (from completeness of that evaluation) by clinical information. My cardiologist mentor, Dave Spodick, once promoted examination of EKGs before assessing reported clinical information and repeating that review, with information directing specific attention. I believe that approach has merit for radiology. The combination/collaboration of radiologist and primary care physician interpretations mirrors that approach and is certainly worth encouragement.

The article by Sait and Tombs[1] provides a useful approach to assessment of posterior–anterior chest x-rays, but that is only half the challenge. Just as important is to also include evaluation of the lateral chest x-ray, a source of clinically-pertinent information that often eludes radiologist's reports.[2–5] Evaluation for the normally progressive vertebral (anterior to the vertebrae) darkening (loss of radio-opacity) as one visually descends the vertebral column is critical. Persistence of opacity suggests the presence of a lower lobe infiltrate, often not apparent on posterior–anterior x-ray views.[4,5] Assessment of vertebral body internal defects and shape is valuable for identification of the anterior margin scalloping that is characteristically produced by aortic aneurysms and for lytic or blastic lesions related to neoplasia and infection (eg, tuberculosis or brucellosis).[5] While aneurysms, neoplasia, and infection may not be common, suggestive findings are often not visualized on posterior–anterior chest x-rays and their diagnosis, delayed if only anterior–posterior view x-rays are assessed. Perhaps the most important contribution of the lateral chest x-ray is affording the opportunity to recognize osteoporosis on the basis of vertebral compression fracture.[5] Notation of reduction of the height of the anterior aspect of a vertebra (compared with its posterior height) identifies the presence of a compression fracture. Such recognition is cost-effective, obviating

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the need for further diagnostic testing and the additional radiation exposure associated with such techniques.

Collaboration between the radiologist and clinician provides an important component in the evaluation of the patients we serve. Such an approach can only be advantaged if clinicians provide appropriate information to the radiologist and are comfortable with evaluating the x-rays we request.

Disclosure

The author reports no conflicts of interest in this communication.

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