

Letters to the editor

Identification of incorrect radiological diagnosis

Sir

We read with interest the article by M. R. James, A. Bracegirdle & D. W. Yates (1991). We agree with the authors that the inclusion of the accident and emergency (A&E) senior house officer's (SHO) radiological diagnosis on the X-ray request form facilitates the prompt identification of incorrect radiological diagnosis. We have been encouraging this practice in our department for some time, the principal problem appears to be ensuring that all doctors comply.

At St Peters Hospital radiographs of all patients discharged from A&E are reviewed daily at 8 a.m. by the A&E consultant or registrar. During a 2-month period we audited the effect of the radiological review by senior and middle grade A&E staff. A total of 3116 radiographs were reviewed (mean 51 radiographs per day). Of these, 2397 (79.6%) were normal and 604 (19.4%) were correctly diagnosed as abnormal by the doctor who first saw the patient. The review identified a further 38 (1.2%) missed positive radiological diagnoses. A further 75 (2.4%) abnormal radiological diagnoses that went unidentified by the review were reported by the radiologist. Although the number of abnormalities missed by the SHO and identified at the review were small, some potentially serious abnormalities were identified including a depressed skull fracture and tibial plateau fracture. By contrast, most of the abnormalities missed in A&E and detected only by the radiologist were not of immediate clinical significance.

The daily review of radiographs by senior and middle grade A&E staff is considered to have other benefits. It provides an opportunity for teaching and for the audit of satisfactory completion of X-ray request forms. The review could be expanded easily to audit the use of radiology in A&E. However, it is dependent on the availability of senior and middle grade staff time for this purpose. We find that the review of radiographs in A&E can be completed in approximately 30 min each morning.

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REFERENCE

James M. R., Bracegirdle A. & Yates D. W. (1991) X-ray reporting in accident and emergency departments: an area for improvements in efficiency. *Archives of Emergency Medicine* 8, 266–270.