The erroneous use by an accident and emergency department of plain abdominal radiographs in the diagnosis of constipation

A. BEWLEY, M. J. CLANCY & J. R. W. HALL

Department of Accident and Emergency Medicine, St James's University Hospital, Leeds, England

Constipation is not a well-defined term but most would agree that it is a clinical diagnosis. A history of reduced frequency of defaecation, difficulty in emptying the rectum, the passage of hard faeces, and the finding of hard faeces per rectum are the salient features of constipation (Jewell, 1983). To make the diagnosis on the basis of a variable amount of faecal shadowing on the abdominal radiograph without a supporting history and examination is illogical.

Prompted by the frequency with which faecal shadowing was taken as an indication of constipation, a study of 450 consecutive patients who had plain abdominal radiographs taken within the Accident and Emergency Department of St James's University Hospital, Leeds, during September and October 1988 was undertaken. The casualty cards of 412 patients were available. Sixty-five patients had constipation as their final diagnosis, 41 of whom were diagnosed as constipated on clinical grounds prior to the X-ray and whose diagnosis remained unaltered. In the remaining 24 the diagnosis was based on the plain abdominal radiographs with no documented clinical features to support the diagnosis. Seventeen of this latter group had treatment for constipation initiated, including nine who were admitted for enemas.

Can faecal shadowing on abdominal X-rays alone be invoked to make the diagnosis of constipation? The amount of faeces present is widely variable depending on such factors as when the patient last defaecated and if they had a high fibre diet. Because of this normal variation, faecal shadowing alone should not be used to diagnose constipation. Does it matter if constipation is erroneously diagnosed? The answer must be 'yes' in that having labelled the patient as constipated this may obscure the true underlying diagnosis, and secondly the treatment of constipation is not innocuous. There are plentiful records of serious complications following enemas (Martin *et al.*, 1987) and the use of laxatives (Godding, 1976). Clinicians should not take the presence of faecal

shadowing on a plain abdominal radiograph alone as an indication of constipation and should not compound this error by initiating treatment for constipation.

REFERENCES

- Godding E. W. (1975) Constipation and allied disorders. *The Pharmaceutical Journal* **215**, 8–15.
- Jewell D. P. (1983) *Oxford Textbook of Medicine*. 12–14 Oxford University Press, Oxford.
- Martin R. R., Lisehora G. R., Braxton M. & Barcia P. J. (1987) Fatal poisoning from sodium phosphete enema. *Journal of the American Medical Association* **257**, 2190–2.