A study on the use of abdominal X-ray in an emergency department

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Objective: 1) To study the current use of abdominal X-rays (AXR) in our emergency department (ED). 2) To evaluate the clinical predictors for positive AXR findings. Methods: During the 40 days study period, all patients who had taken abdominal X-rays were included. The attending doctor filled in a questionnaire on demographic data, clinical features and outcome. The three radiologists who participated in this study reported the films and consultant emergency physicians then commented on the appropriateness of the request. The clinical features, which were predictive of positive radiological findings, were sorted out using univariate analysis. Results: 64 patients were included in the 40 days study period. The rate for AXR request was 3.4 per 1000 patients. The most common presenting complaints were abdominal pain (85.9%) and constipation (45.3%). The most frequent clinical findings were abdominal distension (35.9%) and hyperactive bowel sound (31.3%). Only two of the clinical features, including vomiting and rebound tenderness, were found to have significant correlation with positive X-ray findings. Most of the AXR requests and interpretations by ED doctors were considered to be appropriate. (Hong Kong j.emerg.med. 2002;9:30-33)

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