398 Abdominal X-Rays: Are They Still Relevant? a Review of Outcomes Following Emergency Abdominal Plain Films

P.T.M. Van, S. Masoodi, E. Cribbs, N. Pawa
West Middlesex Hospital, London, United Kingdom

Background: Abdominal plain films (AXR) have historically been a routine investigation in Surgical and Emergency Departments (ED), however when considering CT imaging yields significantly more diagnostic information, AXRs are ineffectual in comparison as an aid to decision making. With CT scanning and reporting readily available 24/7, are AXRs still practical?

Aim: To assess the utilisation and outcomes of emergency abdominal films.

Method: All emergency AXRs performed across the trust in a 15-day period were identified retrospectively from our electronic database and were compared with outcomes obtained from our electronic record system.

Results: 248 emergency AXRs were performed, 153 Emergency Department and 95 inpatient (IP) requests. 163 (66%) were reported normal, 85 (34%) as abnormal. Of those reported as normal, 26% had further imaging (30% from ED, 17% from IP). Of those reported abnormal, 49% had no further imaging performed (62% from ED, 37% from IP). The odds ratio of admission between ED patients with a significant AXR and an insignificant AXR was 1.34 (95%CI: 0.68–2.83, p<0.05).

Conclusions: One quarter of AXRs reported as normal underwent further imaging, but almost half of the AXRs with reported pathologies did not. This suggests that the usefulness of AXRs acutely is limited, as the presence or absence of abnormalities on the AXR was not a reliable predictor of further investigation nor patient outcome. We therefore suggest re-examination of their utilisation.