

AB175. 58. Plain film of abdomen—an audit of its emergency usage in a level III hospital

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Background: Plain film of abdomen (PFA) remains one of the most commonly utilized investigations in clinical practice. Aim of the study was to audit appropriateness of the use of PFA in emergency department (ED) to assess its impact on patient outcome. We compared indications of PFA & clinical diagnosis while requesting PFA, with radiological findings. Results were compared with Royal College of Radiologists' guidelines.

Methods: A total of 200 consecutive patients were selected who had PFA performed in ED. Data were collected from NIMIS system. This included clinical indications for PFA, provisional diagnosis, positive radiological findings, any

further imaging that the patient required and data of ordering physicians (SHO, registrar or consultant) in ED.

Results: PFA was found to have low sensitivity. Fifty-six percent X-rays were reported normal. Only 35% PFA requests met the indications according to Royal College of Radiologists' guidelines. About half (49%) of the patients with normal X-ray reports required further imaging (CT scan or ultrasound).

Conclusions: Most PFAs are inappropriately requested in the ED. As PFA has low sensitivity & specificity, focused investigations should be carried out to diagnose certain medical conditions. RCR guidelines for requesting abdominal X-ray should be displayed in ED. Unnecessary PFAs cause increased radiation exposure with its risks. Overutilization of X-rays also results in extra burden on HSE budget.

Keywords: Plain film of abdomen (PFA); abdominal pain; radiation exposure; radiological findings

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