

Re- Audit: Appropriateness of Abdominal XR- Evaluating Plain Abdominal Radiographs usage in ED in relation to the RCR indications after the intervention.

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Objectives:

- Evaluate the compliance of Plain Abdominal Radiograph requests based on RCR iRefer guidelines after the intervention.
- The previous audit cycle showed 36% of the Abdominal XR requests did not follow the RCR guidelines for the Audit.
- Thus, an intervention was in place in order to educate clinicians regarding safe and appropriate practice of AXR booking.

RCR Guidelines [1]: Expects 100% of abdominal X-rays to meet the one or more of the following clinical indications:

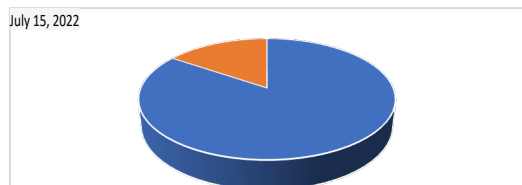
- Acute exacerbation of inflammatory bowel disease
- Palpable mass (specific circumstances),
- Constipation (specific circumstances),
- Acute and chronic pancreatitis (specific circumstances)
- Sharp/poisonous foreign body
- Smooth and small foreign body, e.g., coin, battery (specific circumstances)
- Blunt or stab abdominal injury.

Methods:

- Multiple posters were placed in A&E and Pediatric A&E
- 49 ED Abdominal were retrospectively evaluated between 14/11/22 to 18/11/22.
- Reporting standards were compared to the results gathered during the 1st loop of this audit project: 36% of the plain radiographs requests were not indicated. 14% of the requested were blank which 100% of the blank requests were normal. The first loop results were between 9/5/22 and 13/5/22 where 50 AXR were evaluated.
- Reporting standards were compared to the guidelines above.

Results:

- 9/49 (18%) patient requests are not compliant to the guidelines.
- 5/9 (56%) of the non-indicated XRs were normal



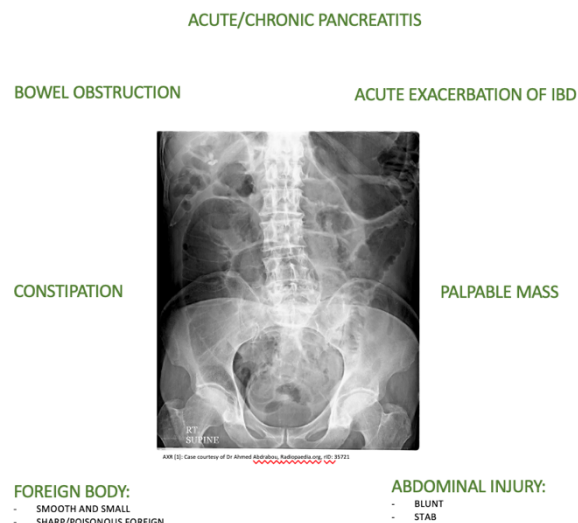
Conclusion

- The AXR guidelines serves a purpose to reduce inappropriate radiation exposure to patients where AXR is not indicated.
- An Improvement of 18% has been seen since the last audit cycle.
- However, RCR expects 100% of the AXR scan requests to fulfill the criterias.
- Further awareness and education of clinicians is needed to improve compliance.

References

- 1) <https://www.rcr.ac.uk/audit/indications-plain-abdominal-films-emergency-department-rcr-guidelines>
- 2) [https://www.clinicalradiologyonline.net/article/S0009-9260\(16\)30165-9/fulltext](https://www.clinicalradiologyonline.net/article/S0009-9260(16)30165-9/fulltext)

ABDOMINAL X-RAY INDICATIONS



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Figure 1: Poster with RCR indications for AXR