

**Role of X Ray in Patients with Acute Abdomen in a district hospital Western Rajasthan**Banwari Lal Nayak<sup>1</sup>, G. L. Meena<sup>2</sup><sup>1</sup>Department of Radiodiagnosis, Govt.D.B. Hospital Churu, Rajasthan, India<sup>2</sup>S.P.Medical College, Bikaner, Rajasthan, India.**Correspondence Author:** Dr G.L.Meena, Department of Radiodiagnosis, S.P. Medical College & Associate Group of PBM Hospitals, Bikaner, Rajasthan, India.**Type of Publication:** Original Research Paper**Conflicts of Interest:** Nil**Abstract****Background:** Acute abdominal pain is a common chief complaint in patients examined in the emergency department (ED). Imaging plays an important role in the treatment management of patients.**Material and Methods:** This study was done on patient presented with acute abdomen in Department of Radiodiagnosis, Department of Radiodiagnosis, Govt. D.B. hospital Churu, Rajasthan. X-ray done in 300 patients.**Results:** X-Ray was 100% diagnostic in cases of perforation peritonitis and appendicular lump. Intestinal obstruction was diagnosed in 92% cases and renal stone diagnosed in 80% cases.**Conclusion:** This study shows that simple X-Ray plays an important role in definite diagnosis of acute abdomen.**Keywords:** Acute Abdomen, X-Ray, Haematological, Health care, Renal Stone.**Introduction**

Acute abdominal pain is a common chief complaint in patients examined in the emergency department (ED) and can be related to a myriad of diagnoses. Of all patients who present to the ED, 4%–5% have acute abdominal pain. Obtaining a careful medical history and performing a physical examination are the initial diagnostic steps for these patients. On the basis of the results of this clinical

evaluation and laboratory investigations, the clinician will consider imaging examinations to help establish the correct diagnosis<sup>1</sup>.

Plain abdominal radiography is a diagnostic tool that continues to be used in the management algorithm of patients presenting with acute abdominal pain. The diagnostic value of plain abdominal radiographs (PAR), which were once believed to be reliable, has been questioned. There has, however, been a negligible shift in the emphasis placed on this investigation in evaluating a patient with acute abdominal pain. The diagnostic capabilities, cost-effectiveness, side-effects due to unnecessary radiation exposure and patient discomfort related to transportation are factors worth considering when performing this radiographic investigation. Furthermore, irrelevant and over-utilization of radiographic investigations cause significant financial wastage to both patients and the health care provider.<sup>2</sup>

**Material and Methods**

The present study was conducted in the Department of Radiodiagnosis. All the patients with acute abdomen were included in the study. All the patient with acute abdomen comes in Department of Radiodiagnosis, Govt.D.B. Hospital Churu, Rajasthan with acute abdomen formed part of study. Patients with abdominal trauma, obstructed

hernia and malignancy were excluded from the study. Patients were subjected to routine haematological, urine examination and biochemical estimations. Patients were subjected to scout Xray abdomen in standing position.

### Results

Table-1: Role of Scout X RAY In Acute Abdomen

Disease group	No.of x-ray	x-ray positive	Percentage
Perforation Peritonitis	50	50	100
Intestinal obstruction	50	46	92
Appendicitis	50	0	0
Appendicular lump	50	50	100
Renal stone	50	40	80
Abscess	50	25	50
Total	300	211	70.33

X-Ray was 100% diagnostic in cases of perforation peritonitis and Appendicular lump. Intestinal obstruction was diagnosed in 92% cases and renal stone diagnosed in 80% cases.

### Discussion

The acute abdomen remains a challenge to surgeons and other Physicians. Abdominal pain is most common cause for hospital admissions in most parts of the world. An early diagnosis of the underlying cause is of great value for prompt selection of appropriate management, surgical or conservative, thereby reducing the morbidity and mortality on one hand and unnecessary laparotomy on other.

Studies are available abdominal X-RAY in acute abdomen<sup>3,4</sup> Walsh et al<sup>4</sup>, while evaluating the role of immediate X-ray in acute abdomen showed that the plain X-Ray in

70.33% of their cases. Walsh et al<sup>3</sup> shown that while plain films use full in acute abdomen.

### Conclusion

Acute abdomen is the most common presentation in emergency surgical cases. Definite diagnosis is very important. For correct diagnosis X-Ray plays an important role.

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