## **Original article:**

# Surgical management of abdominal pain: Analytical study

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#### Abstract:

**Introduction:** Acute abdominal pain accounts for 7–10% of all Emergency Department visits. Nevertheless, the epidemiology of AAP in the ED is scarcely known.

Material and methods: The present work was carried in Department of Surgery in last one year. The sample size was estimated with the help of expert. Total of 118 cases record was collected from records as per prescribed format and inclusion criteria.

**Results:** In our present study, out of total 118 cases there were 74 were male patients while 44 were female patients. The most frequent cause was NSAP (34.22 %), followed by renal colic (28%).These two diagnoses thus represented >60% of all causes. Other less frequent causes included gastroenteritis (0.34%) pancreatitis (1.22%), oncologic pain (3.50%), extra-abdominal causes of abdominal pain (1.78%), hernias (0.50%), bowel obstruction (0.64%) etc. Very minor no significant differences were observed between genders. Cases admitted were further shows complications were only 12 % while these were very interestingly not found correlated with stay in duration from metanalysis of records.

**Conclusion:** This conclusion is supported by the data of review and meta-analysis of the scientific literature, showing that the length of hospital stay and the rate of complications or readmission were not significantly different.

Keywords: acute abdomen, emergency medicine, abdominal pain

### Introduction:

Acute abdominal pain (AAP) accounts for 7–10% of all Emergency Department (ED) visits. Nevertheless, the epidemiology of AAP in the ED is scarcely known. <sup>1</sup> The modern physician should be humbled by the fact that, despite diagnostic and therapeutic advances (computed tomography [CT], ultrasonography, and laparoscopy), the misdiagnosis rate of the most common surgical emergency, acute appendicitis, has changed little over time.<sup>2</sup> On occasion, a patient with acute abdominal pain will present in extremis. The ill-appearing patient with abdominal pain requires immediate attention. This is particularly so in the elderly, as the overall mortality rate for all older patients with acute abdominal pain ranges from 11%–14%, and those presenting in an unstable fashion have an even poorer prognosis.<sup>3</sup> The aim of this study was to investigate the management outcome of AAP in an adult population admitted to an urban ED.

## Material and methods:

The present work was carried in Department of Surgery in last one year. The sample size was estimated with the help of expert. Total of 118 cases record was collected from records as per prescribed format and inclusion criteria . Inclusion criteria:

- 1) Age more than 18 years
- 2) The patients admitted for first time with abdominal pain were only included in present study.

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Exclusion criteria:

- 1) Age less than 18 years
- 2) In female patients pain related to gynecological cause .
- 3) Repeated visiting patients

The clinical outcome of AAP was investigated by retrospective analysis of all records of visits for abdominal pain in adult patients during the entire yearat the suregery department as emegergency.

All selected cases were then classified according to age, gender and final ED diagnosis.

All the patients with repeated ED admissions for the same complaint within 4 and 21 days after first ED visit were thoughtfully scrutinized.

We further analyzed them into different groups of diagnosis and management protocol was summarized into tabular format.

## Results

Table 1) Cases as Gender wise distribution.

S.NO.	Gender	Number of cases
1	Male	74
2	Female	44
	Total	118

Table 2) Classification of cases as per etiological base

S.NO.	Etiology	Number of cases
		(%)
1	NSAP	34.22
2	Renal colic	28
3	Gastroenteritis	0.34
4	Pancreatitis	1.22
5	Oncologic pain	3.50%
6	Abdominal pain	1.78
7	Hernia	0.50

Out of total 118 cases there were 74 were male patients while 44 were female patients.

The most frequent cause was NSAP (34.22 %), followed by renal colic (28%) .These two diagnoses thus represented >60% of all causes.

Other less frequent causes included gastroenteritis (0.34%) pancreatitis (1.22%), oncologic pain (3.50%), extraabdominal causes of abdominal pain (1.78%), hernias (0.50%), bowel obstruction (0.64%) etc. Very minor no significant differences were observed between genders.

The 62.22 % patients needed urgent admitted in wards while remaining were treated as ODP cases.

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Table 3 ) Management of cases

S.NO.	Type of management	Number of cases
1	Medical	22
2	Surgical	35
3	Complications	14

The patients adimmted in wards were further managed in following ways.

- 1) Medical management only : 22 patients
- 2) Surgical management 35 patients

Cases admitted were further shows complications were only 12 % while these were very interestingly not found correlated with stay in duration from metanalysis of records.

## **Discussion:**

In our present study, out of total 118 cases there were 74 were male patients while 44 were female patients. The most frequent cause was NSAP (34.22 %), followed by renal colic (28%) .These two diagnoses thus represented >60% of all causes. Other less frequent causes included gastroenteritis (0.34%) pancreatitis (1.22%), oncologic pain (3.50%), extra-abdominal causes of abdominal pain (1.78%), hernias (0.50%), bowel obstruction (0.64%) etc. Very minor no significant differences were observed between genders.

The widespread use of sophisticated imaging techniques was found to bring marginal improvements of diagnostic specificity in the last decades, especially for surgical illness ,but has not generated a substantial reduction of the admission rate .<sup>4</sup>

Diagnostic delay, late management and the risk of clinical worsening are the leading concerns of many EPs during the evaluation of patients with AAP. A comprehensive physical examination, close observation and serial diagnostic testing were found to be effective means to lower the risk of adverse outcome <sup>.5,6,7</sup>

### **Conclusion:**

This conclusion is supported by the data of review and meta-analysis of the scientific literature, showing that the length of hospital stay and the rate of complications or readmission were not significantly different.

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