Section: Surgery

Original Research Article

THE INCIDENCE OF RIGHT ILIAC FOSSA PAIN IN FEMALE PATIENTS PRESENTING AS ACUTE ABDOMEN IN A TEACHING HOSPITAL BASED STUDY

Manoj Kumar Mishra[1], Jaya Kumari[2]

[1]Associate Professor, Department of Surgery, World College of Medical Sciences Research and Hospital, Jhajjar, India.
[2]Associate Professor, Department of Surgery, World College of Medical Sciences Research and Hospital, Jhajjar, India.

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Corresponding Author:
Dr. Manoj Kumar Mishra,
Email: manojsnmcian@gmail.com

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ABSTRACT

Background: The main reason for emergency surgeries in hospitals across our country is acute abdominal pain.The origins of this clinical condition are varied; it can arise from any involvement of an abdominopelvic organ. **Materials and Methods:** A follow-up study conducted in a hospital involved 46 cases that presented with acute abdomen at the emergency department. All required examinations were performed to verify the cause of acute abdomen. The cases were from the surgery and gynecology departments where they underwent operations. The patients were tracked from their admission in the casualty department to the final outcome. **Result:** The majority of the 46 instances of acute abdomen, or 24 (52.17%), were caused by acute appendicitis. In nine cases (19.56%), renal colic brought on by calculi ensued. Of the 13 gynecological cases, 6 (14.04%) were caused by ectopic pregnancy, and 7 (15.21%) were caused by ovarian cysts. **Conclusion:** The authors obtained outstanding results, as there were no significant complications or recorded fatalities. Careful diagnosis and swift treatment can save a patient's life and lower the complication rate.

INTRODUCTION

One of the most frequent causes of acute abdomen and a leading reason for urgent abdominal surgery globally is appendicitis, which is an inflammation of the vestigial vermiform appendix.[1] Acute abdomen is a significant clinical emergency entity since it accounts for 5–10% of all patient presentations to casualty.[2] Acute abdominal pain frequently presents itself to casualty physicians, who become even more concerned because the diagnosis is difficult. This is because the causes of acute abdomen are always quite varied, and the traditional symptoms are obscured, making the diagnosis challenging. The causes can be anything from minor or careless to serious enough to endanger the patient's life. Any hospital department, such as the obstetrics and gynecology department for patients with disorders like ovarian cysts or ectopic pregnancies, or the surgery department for patients with acute appendicitis, may refer the cause. About 25% of individuals with acute abdomens still have nonspecific diagnoses even after a thorough assessment.[3] In comparison to older patients, younger patients have more severe acute abdominal symptoms.Rather than experiencing acute pain, elderly patients may exhibit chronic discomfort.[4] In casualty admissions, acute abdomen is frequently observed.In order to diagnose, treat, and provide the best relief for patients with acute abdomen who present to the casualty, the casualty doctors must be knowledgeable about the most prevalent causes of acute abdomen. This will increase the likelihood that these patients will be discharged early.[5] The most prevalent presentation among females in the reproductive age range, which is typically defined as those between the ages of 15 and 45, is pain in the right iliac fossa. They won't all have appendicitis. As a result, thorough assessment can save needless tests and operations in certain situations. In certain situations, close observation alone could be enough.[6] The best course of action is to watch the patient and wait when a patient arrives at the casualty with an acute abdominal complaint and the doctor discovers that the patient is not exhibiting the typical symptoms. However, this approach may put the patient's life in danger in certain situations when they are exhibiting vague symptoms. These patients may experience infertility, peritonitis, or bleeding.[7] As was previously said, making an accurate diagnosis based solely on clinical signs and symptoms is quite challenging. However, with the

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advancements in medical technology, the use of USG, CT scans, and other procedures can now aid in better diagnosis.[8] Therefore, the current study was conducted to investigate the prevalence of ovarian cysts and appendicitis in female patients who presented with acute abdomen.

MATERIALSANDMETHODS

This present study was conducted in the Department of surgery, World College of Medical Sciences Research and Hospital, Jhajjar, collaboration with department of Obstetrics and Gynecology during the period December,2023 to November,2024. Of the 1458 casualty admissions, 46 instances involved acute abdominal pain. Since they gave their consent and were deemed qualified for the current investigation, all were examined. Every patient underwent a comprehensive evaluation. A thorough physical examination and a detailed clinical history were performed. Every discovery, including sex, age, and name, was noted. All 46 patients underwent a full blood examination, a full urine analysis, and an abdominal X-ray. In questionable cases, they additionally had abdominal CT scans and ultrasonography. Every patient had emergency surgery in the gynecology and surgery departments, depending on the cause. Complications following surgery were observed. The patient was released once she was fully recovered. The SPSS-20 version was used to analyze the data.

RESULTS

There were 1458 admissions in all over the one-year study period. 46, or 3.15 percent, of the 1458 patients hospitalized to the World College of Medical Sciences Research & Hospital's casualty department had acute abdominal pain. The study group for this investigation consisted of these 46 instances.

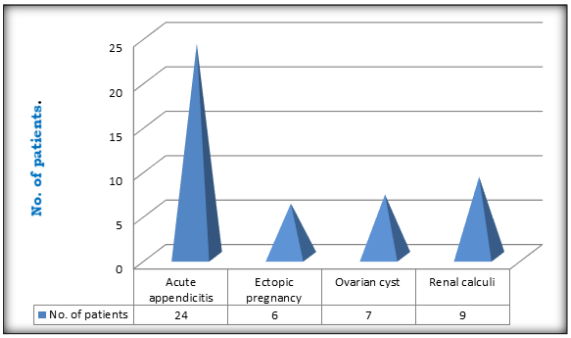

Figure 1: Shows the etiology of acute abdomen.

The majority of the 46 instances of acute abdomen, or 24 (52.17%), were caused by acute appendicitis. In nine cases (19.56%), renal colic brought on by calculi ensued. Of the 13 gynecological cases, 6 (14.04%) were caused by ectopic pregnancy, and 7 (15.21%) were caused by ovarian cysts. [Figure 1]

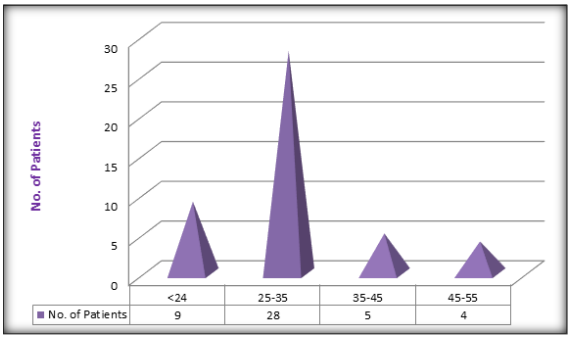

Figure 2: Shows the distribution of acute abdomen cases a/c to age group.

The majority of the cases—28 instances, or 60.86%—belonged to the 25–35 age range. Nearly nine cases, or 19.56%, included people under the age of twenty-four. Just four of the instances were in the 45–55 age range, while five of the cases were in the 35–45 age range. As a result, the young age group had the highest incidence of acute abdomen, accounting for 52.17% of all cases. [Figure 2]

Table 1: Shows the post-operative complication and outcome among acute abdomen cases

Complications/outcome	No. of patients (%)
Delayed healing	11 (23.91%)
No post-operative complications	35 (76.08%)

Every case was operated on in the gynecology and surgery departments.Just 11 (23.91%) had delayed wound healing, and these were treated right away.Nobody was experiencing any serious complications.There were no fatalities.Consequently, the most effective treatment is for acute abdomen. [Table 1]

Table 2: Shows the complications a/c etiology wise

Etiology	Post-operative complications	No. of patients (%)
Acute appendicitis	Yes	04 (16.6%)
	No	20 (83.3%)
Ectopic pregnancy	Yes	05 (83.3%)
	No	01 (16.6%)
Ovarian cyst	Yes	00 (0.0%)
	No	07 (100.0%)
Renal calculi	Yes	00 (0.0%)
	No	09 (100.0%)

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Analysis of complications by etiology revealed that delayed wound healing was the most prevalent complication rate in cases with ectopic pregnancy. While it was 16.6% in cases of acute appendicitis, it was zero in cases of renal calculi and ovarian cysts. [Table2]

DISCUSSION

Acute abdominal pain was quite rare (3.15%). The fact that the current study solely included female patients may be the cause of this low occurrence.

In the current study, 52.17% of the cases included people under the age of 35. In their study, Chanana L et al. also discovered that 55.6% of the cases were younger, falling between the 15–40 age range.[9] Additionally, the authors discovered that men were more impacted than women. However, the current study only included female participants. Most participants in the authors' study had a history of acute abdominal pain. Over half experienced dull, abrupt-onset abdominal pain. In 45.8% of the cases, the pain was in the lower abdomen. We discovered that the incidence of acute appendicitis was high, at 54.7%, whereas the authors found it to be 10.6%. In the current study, the death rate was zero, but the authors reported a 2.3% death rate. 8. The authors came to the conclusion that when treating patients of acute abdomen, several diagnoses should be taken into account. 286 cases that were admitted to the emergency room were examined by Abbas SH et al.[10] Using logistic regression multivariate statistical analysis, they discovered that some indicators, such as vomiting, guarding, elevated heart rate, and elevated white blood cell count, were predictive of the underlying morbidity. The authors came to the conclusion that the patient might not need any medicinal or surgical procedures if these symptoms were absent. 508 female patients participated in a study identical to this one by Morino M et al.[11]In comparison to cautious observation and intervention only in specific designated circumstances, they assessed the necessity of laparoscopy. They divided into two comparable groups, one of which was operated on and the other closely watched. Only 39.2% of the observation group needed surgery since their signs and symptoms called for it.The incidence of acute appendicitis was 30.1%, which is less than what we discovered. Compared to the lap group, the observation group experienced a considerably higher recurrence of the stomach pain. However, the authors came to the conclusion that observation is just as effective as surgery. In their study of 600 patients with acute abdomen, Staniland JR et al. discovered that 66% of them possessed the characteristic symptoms of acute abdomen, whereas the remaining patients did not.[12]The authors came to the conclusion that 30% of cases might not benefit from a clinical diagnosis. Similar to the current study's findings, Gajjar R et al. discovered that 52% of the patients were young.[13]Men made up 63%.In 64% of the cases, the discomfort started suddenly.Forty percent of the patients experienced widespread pain.Eighty percent of the cases did not exhibit radiating pain.In 56% of the instances, there was nausea. In 42 percent of the cases, vomiting was evident.In 18% of the cases, urinary symptoms were seen.Only 3% of cases were gynecological, whereas 25% of cases were in the current study.We discovered that acute appendicitis was the most common cause in 52.17% of the cases, whereas the authors concluded that ureteric colic was the most common. Similar to the current investigation, in which we also examined all female patients, Rama Rao P et al. evaluated all female patients.[14]Similar to the results of the current study, which similarly revealed acute appendicitis to be the most prevalent etiological diagnosis, they came to the conclusion that this condition was the most common etiological diagnosis.The authors also discovered that the most common age group impacted was 25–35 years old, which is consistent with the results of the current study, which also revealed that this age group was most frequently impacted. A retrospective research involving 450 instances of acute abdomen was conducted by Caterino S. et al.[15] They made an effort to determine the most frequent reasons for acute abdominal pain. Similar to the results of the current study, which also indicated that acute appendicitis was the most common etiological diagnosis (54.7%), they discovered that acute appendicitis was the most common etiological diagnosis (16.4%). However, our rate was about three times higher than theirs. While there were no deaths in our trial, the authors reported a 4.2% death rate.

CONCLUSION

In summary, the most frequent cause of acute abdomen in this study was acute appendicitis. Most often, younger age groups were impacted. Gynecological causes such as ovarian cysts and ectopic pregnancy were responsible for about 28.26% of the cases. Therefore, the most common cause of acute abdomen in females is acute appendicitis, and this study provides important guidance for new trauma physicians.

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