ORIGINAL RESEARCH PAPER VOLUME-6 | ISSUE-7 | JULY-2017 | ISSN No 2277 - 8179 | IF : 4.176 | IC Value : 78.46

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

A STUDY ON PERFORATED AND NON-PERFORATED APPENDICITIS ADMITTED IN JLNMCH, BHAGALPUR

General Surgery

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ABSTRACT

Appendicitis is common cause of acute abdomen admitted in emergency. In this study we compared the patients with appendicitis and perforated appendicitis admitted in our emergency department. **Materials and Method:** In this study, 80 cases were taken with any age. Study was done in surgery department of JLNMCH, Bhagalpur, Bihar from April 2016 to March 2017. All cases were registered fulfilled the inclusion criteria and exclusion criteria. Age, sex, symptoms, duration, types of surgery performed, postoperative complications, mortality, and duration of hospital stay were analysed. **Results-** Out of 80 patients 50 were male and 30 were females. The average age group of presentation was 28 years. The most common presenting complaint was abdominal pain in appendicitis and abdominal pain with distension and not passing stool and flatus in perforated appendicitis. Symptom duration was higher in perforated appendicitis. Patients with perforated appendix had high Alvarado score. Appendicectomy was the most commonly done operation in 70 cases. The average duration of the operation was about one hours. Incidence of gangrenous and suppurative appendicitis was higher in cases of perforated appendicitis Wound infection was the most common post operative complication in 10 cases of appendicitis and 21 cases of perforated appendicitis. Average number of days hospital stay was 7 days in appendicitis and 15 days in perforated appendicitis. Mortality was noted in 5 cases of perforated appendicitis. Conclusion-Both are emergency conditions and should be operated as soon as possible to prevent the associated mortality. Appendicectomy was the choice of operation. Patients with longer duration of pain have higher incidence of perforation. Alvarado score can predict the likelihood of perforation

KEYWORDS:

appendicitis, perforated appendicitis, Appendicectomy, abdominal distension, wound infection.

Introduction

Acute appendicitis is the most common condition in children that requires emergency surgery and is one of the most common causes of hospitalization. Perforation occurs with rates ranging between 23% and 73%. With the trend toward conservative management of perforated appendicitis as opposed to immediate appendectomy for nonperforated appendicitis, differentiation between the two conditions has become increasingly important. Because clinical differentiation is not always possible, clinicians often rely on imaging findings. Perforation of an inamed appendix occurs in 15% to 25% of patients treated surgically for suspected acute appendicitis, with the highest rates encountered in young children and elderly patients. Traditionally, perforation has been attributed to a delay in diagnosis. Consequently, a low threshold for early appendicectomy has been recommended. During the past decades this attitude has changed, and observation of patients with equivocal signs of acute appendicitis has been recommended. Recent studies on the epidemiology of perforated acute appendicitis showed that there is a constant incidence of perforation in all age groups, while non-perforated appendicitisismostlya disease of younger people. This led to the idea that perforated and non-perforated acute appendicitis are different diseases. This hypothesis was supported by a recent multi-centre study that concluded that perforated and non-perforated acute appendicitis were clinically different. Recent epidemiological studies have shown different incidence patterns of perforated and non-perforated acute appendicitis, and the idea that they are two separate diseases has been put forward. This hypothesis was supported by a recent study that concluded that perforated and non-perforated acute appendicitis are two clinically different diseases. Fecoliths are found nearly in 90% of the patients with acute gangrenous appendicitis with rupture. It has been documented that perforated and non-perforated appendicitis may have different pathophysiology affecting the subsequent intraoperative and post-operative picture. Present study was undertaken to study the clinical pattern of presentation and to analyze the difference in the anatomical, biochemical, microbiological, histological determinants in patients of perforated and non-perforated acute appendicitis.

Materials and Method

In this study, 80 cases were taken with any age. Study was done in surgery department of JLNMCH, Bhagalpur, Bihar from April 2016 to March 2017. All cases were registered fulfilled the inclusion criteria and exclusion criteria. Age, sex, symptoms, duration, types of surgery performed, postoperative complications, mortality, and duration of hospital stay were analysed.

RESULTS

1. Out of 80 patients 50 were male and 30 were females.
2. The average age group of presentation was 28 years.
3. The most common presenting complaint was abdominal pain in appendicitis and abdominal pain with distension and not passing stool and flatus in perforated appendicitis.
4. Symptom duration was higher in perforated appendicitis.
5. Patients with perforated appendix had high Alvarado score.
6. Appendicectomy was the most commonly done operation in 70 cases.
7. The average duration of the operation was about one hours. Incidence of gangrenous and suppurative appendicitis was higher in cases of perforated appendicitis
8. Wound infection was the most common post operative complication in 10 cases of appendicitis and 21 cases of perforated appendicitis.
9. Average number of days hospital stay was 7 days in appendicitis and 15 days in perforated appendicitis.
10. Mortality was noted in 5 cases of perforated appendicitis.

Discussion

In children with acute appendicitis, the risk of appendiceal perforation ranges from 23% to 73%. Lee et al. reported that perforation occurred with greater incidence in children younger than 5 years and that abscess formation at presentation occurred more commonly in children older than 10 years. Our results concur with those in that report. The average age group of presentation was 28 years in our study. In comparison with the study done by Hale et al where median age was 23 years the results of our study are comparable. In the study proposed by Hale Et at 64% of the population was males and 36% were females. In our study Out of 80 patients 50 were male and 30 were females. We found a significantly higher rate of perforation in children younger than 8 years (62.5%) than in older children (29.5%).

Similarly, older children had a higher incidence of abscess at presentation (44.7%) than did younger children (20%). Once the diagnosis of appendicitis is made, differentiation of perforated from nonperforated appendicitis becomes important. Emergency surgery is indicated for nonperforated appendicitis. Age over. 50 years, a history of acute abdominal pain of classical onset lasting more than 48 hours, a pulse rate greater than 100 per minute, generalized abdominal tenderness in addition to maximum tenderness at McBurneys point, a white cell count in excess of 10,000/mm3 and a poly¬morphonuclear leucocytosis of more than 70 percent. In such a case, urgent surgical

interven¬tion should be sought. The role of inflammatory markers in the diagnosis of acute appendicitis as well as the prediction of perforation remains controversial. inflammatory markers are continuous variables.

Conclusion-

Both are emergency conditions and should be operated as soon as possible to prevent the associated mortality. Appendicectomy was the choice of operation. Patients with longer duration of pain have higher incidence of perforation. Alvarado score can predict the likelihood of perforation. Complication rates were higher in perforated appendicitis.

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