

Original article:

Study of clinical presentations and post surgical complications in acute appendicitis

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Abstract:

Introduction: Appendicitis is a common occurrence in both the adult and pediatric populations. The condition most commonly occurs between the ages of 10 and 20 years with a lifetime risk of 8.6% and 6.7% for males and females respectively.

Material and methods: The sample size was included 50 patients with acute appendicitis admitted in our Department as emergency. We randomly selected patients. Patients with other associated complications were excluded from present study. On admission, patients were clinically diagnosed followed by routine investigations. Appropriate treatment and management was completed.

Results: In our present study, out of 50 patients, there were 44 male patients with only 6 female patients. Mean age of patients was 39.56 years. Majority patients were from lower socioeconomic group. In our study, we found post-surgical complications of acute appendicitis include wound infection followed by bowel obstruction. etc. Pain, nausea and vomiting were basic commonly observed presentation in our study.

Conclusion: In our study, we found post-surgical complications of acute appendicitis include wound infection followed by bowel obstruction. etc. Pain, nausea and vomiting were basic commonly observed presentation in our study.

Keywords : Acute Appendicitis, Intrabdominal Abscess, Antibiotic Therapy, Appendix Perforation

Introduction:

Appendicitis is a common occurrence in both the adult and pediatric populations. The condition most commonly occurs between the ages of 10 and 20 years with a lifetime risk of 8.6% and 6.7% for males and females respectively. (1) Its diagnosis focuses on clinical presentation and imaging modalities classified according to scoring systems such as the Alvarado scoring system. A number of imaging modalities can be used, with CT being the most common one. For acute appendicitis, surgical intervention is considered to be the gold standard of treatment. However, recent research has focused on other modalities of treatment including antibiotics and endoscopic retrograde appendicitis therapy (ERAT) to avoid surgical complications. (2,3)

Appendicitis most often occurs between the ages of 10 and 20 and has a male to female ratio of 1.4:1. The lifetime risk in the United States is 8.6% for men and 6.7% for women [4]. Studies have shown a link between acute appendicitis and the manifestation of colorectal cancer. In fact, 2.9% of patients who suffered from acute appendicitis were found to have colorectal cancer compared to 0.1% of those who did not [5].

Material and methods:

I completed the present study in Department of surgery for six months duration. The study sample size was estimated with experts.

The sample size was included 50 patients with acute appendicitis admitted in our Department as emergency .

We randomly selected patients. Patients with other associated complications were excluded from present study.

On admission, patients were clinical diagnosed followed by routine investigations.

Appropriate treatment and management was completed.

Inclusion Criteria:

All patients admitted with acute appendicitis.

Patients with no any complications

Exclusion criteria:

Complication associated with patients

Earlier history

We collected data and tabulated and was further analyzed.

Results:

In our present study, out of 50 patients , there were 44 male patients with only 6 female patients. Mean age of patients was 39.56 years.

Majority patients were from lower socioeconomic group .

Table 1) Clinical presentation of cases

S.NO.	Clinical features	Number of patients	Percentage
1	Migrating pain	46	92
2	Vomiting	46	92
3	Nausea	42	84
4	Fever	32	64
5	Diarrhea	22	44
6	Tachycardia	12	24
7	Anorexia	6	12

In our present study migrating pain , vomiting , nausea and fever was most common features were observed.

Table 2) Post operative complications

S.NO.	Post operative complications	Number of patients	Percentage
1	wound infection	11	22
2	bowel obstruction	4	8
3	abdominal/pelvic abscess	3	6
4	Death	0	0

In our present study, wound infection is observed the most common complication .

Discussion:

In our study, we found post-surgical Complications of acute appendicitis include wound infection followed by bowel obstruction.etc.Pain , nausea and vomiting were basic commonly observed presentation in our study.

Acute appendicitis (AA) is the leading cause of acute abdominal surgery. It mainly affects young individuals, but its incidence has increased in the elderly. A delay in the diagnosis and treatment of AA in the elderly may lead to other associated complications. This study has aim to evaluated the differences in the presentation and postoperative development of AA in patients older than 50 years based on a retrospective observational clinical study with data collected from the medical records of patients older than 18 years who underwent emergency appendectomy between 2014 and 2015. Between the groups, they were identified significant statistical differences in terms of age, the presence of comorbidities, the severity of appendicitis, the need for a postoperative drain and the length of hospitalization. It is concluded that a patient with AA older than 50 years represents a more serious condition.

According to Pérez-Martinez et al., 2005, although uncomplicated AA may still be considered urgent, delaying surgery until 18 hours after hospital admission does not increase the complication rate [4]. Similarly, a study by Henry et al., 2007 demonstrated that non-surgical treatment of perforated AA was associated with a low complication rate and shorter hospital stay compared to matched controls [5].

Yardeni et al. (2004) recommended that for non-perforated AA, antibiotic treatment should be initiated while delaying surgery 2 to 6 hours after admission. Thus, surgery can be postponed within 24 hours of admission without a significant increase in complications, duration of surgery, and hospitalization [6]. Recently, the benefits of immediate surgery for AA have been questioned. Teixeira et al. (2012) showed that in patients with non-perforated AA, postponing surgery significantly increased the rate of surgical wound infection, but not the risk of perforation [7].

Other authors have studied the role of prolonged time to hospital arrival and delayed surgery after admission as independent predictive factors of complications such as perforation [8]. Some authors believe that tachycardia on admission in patients with AA may be significant as a predictive factor of a higher risk of perforation [8,9].

Other researchers reported no significant increase in rates of perforation and surgical wound infection when appendectomy was delayed. However, a higher risk of wound infection was associated with prolonged duration of

symptoms [10]. In a multicenter study with 1388 patients, surgical wound infection occurred in 5.7% of patients with complicated AA (perforation and gangrene) and in 1.2% of patients with uncomplicated AA. Timing of surgery did not significantly increase the incidence of such complications – 11.5 hours (6.4–14.7 h) versus 9.7 hours (5.8–15.6 h, $p = 0.36$) [11].

In a recent study by Abbas et al. (2016), in children with AA, delayed surgical treatment did not increase the rate of postoperative complications and surgical wound infection [12]. In our department of pediatric surgery, some elements appeared to play an important role in the development of complications such as perforation, surgical wound infection and prolonged hospitalization in patients with AA: duration of symptoms, timing of arrival at our referring hospital from different original services, and timing of surgery after adoption.

Conclusion:

In our study, we found post-surgical Complications of acute appendicitis include wound infection followed by bowel obstruction.etc.Pain , nausea and vomiting were basic commonly observed presentation in our study.

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