Original article:

Study of clinical presentations and post surgical complications in acute appendicitis

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Abstract:

Introduction: Abdominal pain is the primary presenting complaint of patients with acute appendicitis. The diagnostic sequence of colicky central abdominal pain followed by vomiting with migration of the pain to the right iliac fossa was first described by Murphy but may only be present in 50% of patients

Material and methods: The present observational study was conducted in Department of surgery for one year duration. The sample size was included 50 patients with acute appendicitis admitted in our Department.

All these patients were admitted with all age groups.

Results: In our present study, out of 50 patients, there were 42 male patients with only 8 female patients. Mean age of patients was 42.55 years. In our present study wound infection as post operative complication was observed.

Conclusion: Post surgical Complications of acute appendicitis may include wound infection, bowel obstruction, abdominal/pelvic abscess, and, very rarely, death.

Introduction:

Abdominal pain is the primary presenting complaint of patients with acute appendicitis. The diagnostic sequence of colicky central abdominal pain followed by vomiting with migration of the pain to the right iliac fossa was first described by Murphy but may only be present in 50% of patients. Typically, the patient describes a peri-umbilical colicky pain, which intensifies during the first 24 hours, becoming constant and sharp, and migrates to the right iliac fossa. The initial pain represents a referred pain resulting from the visceral innervation of the midgut, and the localised pain is caused by involvement of the parietal peritoneum after progression of the inflammatory process. Loss of appetite is often a predominant feature, and constipation and nausea are often present. Profuse vomiting may indicate development of generalised peritonitis after perforation but is rarely a major feature in simple appendicitis.

Material and methods:

The present observational study was conducted in Department of surgery for one year duration. The sample size was included 50 patients with acute appendicitis admitted in our Department.

All these patients were admitted with all age groups.

Patients with other associated complications were excluded from present study.

The patients were clinical diagnosed followed by investigations. Appropriate treatment and management was done. We collected all information from case sheets of patients.

Results:

In our present study, out of 50 patients, there were 42 male patients with only 8 female patients. Mean age of patients was 42.55 years.

Table 1) Clinical presentation of cases

S.NO.	Clinical features	Number of patients	Percentage
1	Migrating pain	48	98
2	Vomiting	43	96
3	Nausea	41	82
4	Fever	35	70
5	Diarrhea	18	36
6	Tachycardia	15	30
7	Anorexia	8	16

In our present study migrating pain, vomiting 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	9	18
2	bowel obstruction	5	10
3	abdominal/pelvic abscess	2	4
4	Death	1	2

In our present study wound infection as post operative complication was observed.

Discussion:

The acute inflammatory abdomen encompasses the major conditions seen by surgeons working in emergency services around the world. It is a clinical picture ranging from simple, self-limiting, benign diagnoses to those that threaten life and require rapid surgical intervention. About 6.5% of emergency room visits are due to abdominal pain¹.

Acute appendicitis (AA) represents the most common surgical condition in the abdomen. It presents an incidence of 48.1 per 10,000 inhabitants per year, and its peak incidence occurs in patients between ten and 20 years of age. The overall lifetime risk is estimated between 5% and 20%, being 8.6% for men and 6.7% for women^{2,3}. It affects approximately 250,000 patients per year in the United States and is responsible for at least 40,000 hospital admissions per year in England¹. The signs and symptoms are usually anorexia, periumbilical colic, nausea and vomiting, followed by moderate fever (38° C) and signs of peritoneal inflammation in the lower right quadrant of the abdomen^{4,5}. Many of these findings, however, may occur in other clinical or surgical conditions, such as

mesenteric lymphadenitis, intraperitoneal hemorrhage, acute salpingitis, endometriosis, Meckel's diverticulitis, among others. Diagnosis is made based on clinical evaluation and confirmed by leukocyte counting, ultrasonography (US) and radiographic studies of the abdomen^{2.6}. Incorrect diagnosis is more frequent in children, in women, and in the elderly6. The accuracy of a good anamnesis, combined with a well-performed physical examination, is 95% in patients who present a classic clinical picture⁷. The complications resulting from the evolution of the acute inflammatory process, such as suppuration, perforation with or without hemorrhage, and gangrene of the appendix are serious, making early surgery fundamental to contain the evolution of the condition⁵.

The treatment of acute appendicitis is appendectomy, conventional or laparoscopic. However, antibiotic therapy alone, with drugs against Gram negative and anaerobic bacteria, has been used, since it has the potential to considerably reduce the costs associated with surgery⁶. Studies suggest that non-surgical therapy is safe, provided that the patient has an adequate follow-up and can undergo operative treatment if necessary⁶

But despite the technological progress in diagnosis and therapy, acute appendicitis continues to be an important cause of morbidity and mortality, especially in the extremes of age, in which signs and symptoms may not have a classic clinical presentation. This study aims to evaluate the main risk factors associated with the development of complications in patients with acute appendicitis.

Conclusion:

Post surgical Complications of acute appendicitis may include wound infection, bowel obstruction, abdominal/pelvic abscess, and, very rarely, death.

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