Original Research Article

Evaluation of conservative management of acute appendicitis in tertiary care hospital

Umesh Vaishnav[1*], Himesh Chauhan[2]

[1]Associate Professor, GMERS Medical College, Gandhinagar, Gujarat, India
[2]Associate Professor, GMERS Medical College, Sola, Ahmedabad, Gujarat, India
[*]Corresponding author email: **dr_umesh77@yahoo.com**

International Archives of Integrated Medicine, Vol. 3, Issue 2, February, 2016.

Available online at http://iaimjournal.com/
ISSN: 2394-0026 (P) **ISSN: 2394-0034 (O)**
Received on: 11-01-2016 **Accepted on:** 19-01-2016
Source of support: Nil **Conflict of interest:** None declared.
How to cite this article: Vaishnav U, Chauhan H. Evaluation of conservative management of acute appendicitis in tertiary care hospital. IAIM, 2016; 3(2): 41-44.

Abstract

Introduction: Acute appendicitis is one of the commonest causes of acute abdomen with life time risk of 7-8 %. Appendectomy is the most favored treatment of appendicitis in most of the cases. Even after clinoradiological diagnosis 10 percent of cases after appendectomy appendix are found normal. Considered safe and routine surgery few patients develop complications of surgery like recurrent pain, obstruction, wound complications and rarely fistula and death. There are many studies showing encouraging results of conservative management of selective cases of appendicitis.

Aim: Main aim of the present study was to know efficacy of conservative management of selective cases of acute appendicitis and long term symptoms free period of treated cases.

Materials and methods: Present study was done in Surgery Department of GMERS Medical College, Gandhinagar between years 2011-2013. Selected 30 cases above 15 years of age with both sexes were managed conservatively on OPD and indoor. All patients were given antibiotics and symptomatic treatment. Follow up of all cases were done for 2 years after attack of appendicitis. Patients were informed to report immediately if symptoms reappears, or patients operated appendectomy outside. Inclusion criteria were patients above 15 years of age, history of attack less than 72 hours, first attack of appendicitis and exclusion criteria were patient having guarding and rigidity, perforation, appendicular lump, appendicular abscess and peritonitis.

Results: Six patients did not respond to conservative management as symptoms worsens or remain same after completion of treatment and operated. More 3 patients operated in follow up period. There was no case of complication like perforation or abscess formation in operated cases. No case of mortality in this study was found.

Conclusion: Selected cases of acute appendicitis can be managed conservatively with taking patient in confidence and proper communication and follow up.

Key words

Acute appendicitis, Conservative management, Tertiary care hospital.

Introduction

Acute appendicitis is one of the commonest causes of acute abdomen with life time risk of 7-8 %. Appendectomy is the most favored treatment of appendicitis in most of the cases [1]. Even after clinoradiological diagnosis 10 percent of cases after appendectomy appendix is found normal [1-3]. Considered safe and routine surgery few patients develop complications of surgery like recurrent pain, obstruction, wound complications and rarely fistula and death [4, 5]. There are many studies showing encouraging results of conservative management of selective cases of appendicitis [6-9].

Traditionally and for decade appendectomy is the treatment of choice for appendicitis. Similar conditions like colitis, diverticulitis are managed conservatively with good results. Appendectomy usually perceived as minor surgery by common people, sometimes have serious complications and rarely death. As layman believes appendectomy as simple surgery it is difficult for them to accept complication. So when conservative treatment fails patients are more receptive for surgery and complications also. Post appendectomy recurrent pain in abdomen, obstruction, adhesion, and wound complication can occur. There are many studies of conservative management of selected cases of appendicitis with good long term results.

Material and methods

A prospective study was done in GMERS Medical College, Gandhinagar between years 2011 to 2013. Selected 30 patients of both sexes above 15 years of age were included in study. All patients were above 15 years of age with history of pain in right iliac fossa for less than 72 hours and first attack of appendicitis. Detailed history and clinical examination was done. Only patients with tenderness in right iliac fossa were included. Patients having guarding, rigidity, perforation, abscess, lump on clinical examination and radiological reports were excluded from study. Patients unwilling for conservative management were excluded from study. Clinically diagnosed cases of acute appendicitis were confirmed by pathological and radiologically. Six patients were admitted while 24 patients were treated on OPD bases. Admitted patients were given third generation cephalosporine and metronidazole injectable, while OPD patients were given cefixime and metronidazole for seven days. Patients managed conservatively on outdoor were asked to follow up on 72 hours and after one week. Patients were advised to take analgesics only if severe pain. Patients were told to contact immediately if symptoms worsen, vomiting, distension of abdomen, fever. Patients admitted were evaluated daily and changed oral antibiotics after improvement. Patients who did not respond to treatment or worsened were operated by appendectomy. Follow up of patients were done on 3rd day, 7th day, 3rd month, 6th month, 12th month and 24th month. Patients were informed to contact immediately if they develop symptoms related to appendicitis. Patients were told to inform if they get operated outside. Data collected were analyzed.

Results

Out of 30 patients, 18 patients were female, 12 patients were male as per **Table - 1**. Age distribution was as per **Table – 2**. Youngest patient was 17 and oldest was 58 years.

Table – 1: Sex distribution.

Male	Female	Total (n = 30)
12	18	30

Table – 2: Age distribution.

Age (Years)	No. of patients (n=30)
<20	2
21-30	13
31-40	7
41-50	6
51 and above	2

Hours before presentation was as per **Table - 3**.Symptoms wise presentation was as per **Table - 4**. Right iliac fossa pain was present in all cases followed by vomiting, fever, urinary complain and diarrhea.

Table – 3: Hours of attack.

Hours of attack of appendicitis	No. of patients (n=30)
Less than 24 hours	20
24-48 hours	6
48-72 hours	4

Table – 4: Symptoms of appendicitis.

Symptoms	No. of patients (n=30)
Right iliac foss pain	30
Vomiting	7
Fever	10
Diarrhea	3
Urinary complains	2

Injectable antibiotics was given in 6 cases and admitted and 24 patients were given outpatient treatment and given oral antibiotics as per **Table - 5**. 4 Patients did not respond to treatment and were operated after 2 days of treatment. 2 More patients were operated after completion of treatment course after 7 days. More 3 patients were operated in follow up period of 2 years as per **Table - 6**. In operated patients, one patient had perforated appendix and one had developing abscess as per **Table - 7**. All operated cases were operated by laparoscopy without any intra-operative difficulty or complications in surgery or postoperatively.

Table – 5: Type of antibiotic treatment.

Type of antibiotics	No. of patients (n=30)
Oral antibiotics	24
Injectable antibiotics	6

Discussion

Worldwide the standard of care for appendicitis is appendectomy and considered simple and routine surgery [1]. However the mortality rate of operation ranges from 0.07 to 0.7 and from 0.5 to 2.4% in patients without and with perforation respectively. Overall post appendectomy complication rates are around 10-19% for appendicitis without perforation and can reach up to 30% with perforation [4, 5]. So if appendectomy treated successfully with antibiotics, morbidity and mortality can be avoided. In present study 21 out of 30 patients can be treated with conservative method and even operated cases there was no worsening of appendicitis found. In similar study done by Malik AA and Bari SU, 2 patients were operated out of 40 patients received antibiotics treatment and 38 patients managed conservatively [9].

Table – 6: Appendectomies after trial of conservative treatment.

Timing of interval appendectomy	No. of patients (n=9)
Surgery after 48 hours of treatment	4
Surgery after 7 days of treatment	2
Appendectomy in 1 month to 12 month after treatment	2
Appendectomy after 12 to 24 month of treatment	1

Table – 7: Operative findings.

Operative findings	No. of patients
Simple appendectomy	5
Perforated appendix	1
Appendicular abscess	1
Adhesions	2

Conclusion

Selected cases of acute appendicitis can be managed conservatively. It is must to keep patients in confidence and regular follow up is required. When patients were given conservative trial they may tolerate risk of surgery and complication even if occur.

References

1. Addiss DG, Shaffer N, Fowler BS, Tauxe RV. The epidemiology of appendicitis and appendectomy in US. Am J Epidemiol., 1990; 132: 910-23.
2. Raja AS, Wright C, Sodickson AD, Zane RD, Schiff GD, Hanson R, Baeyens PF, Khorasani R. Negative appendectomy rate in era of CT: An 18-year perspective: Radiology, 2010; 256(2): 460-5.
3. Colson M Skinner, Dunnington G. High negative appendectomy rates are no longer acceptable. Am J Surg., 1997; 174: 723-7.
4. Franz MG, Norman J, Fabri PJ. Increased morbidity of appendicitis with advancing age. Am Surg., 1995; 61(1): 40-4.
5. Mason RJ. Surgery for appendicitis: is it necessary. Surg infect (Larchmt), 2008; 9: 481-8.
6. Coldrey E. Five years of conservative treatment of acute appendicitis. J int coll surg., 1959; 32: 255-261.
7. (Anonymous). Combined traditional Chinese and western medicine in acute appendicitis. Chin Med j (Eng), 1977; 3: 266-9.
8. Eriksson S, Granstrom L. Randomized controlled trial of appendicectomy verses antibiotic therapy for acute appendicitis. Br J Surg., 1995; 82: 166-9.
9. Malik AA, Bari SU. Conservative management of acute appendicitis. J Gastrointest Surg., 2009; 13: 96.