pISSN 2349-3305 | eISSN 2349-2902

Original Research Article

DOI: http://dx.doi.org/10.18203/2349-2902.isj20170530

A study on acute appendicitis in a tertiary care hospital in Tamil Nadu, India

K. Suresh Babu*, S. Savitha

Department of Surgery, Government Royapettah Hospital, Kilpauk Medical College, Tamilnadu, India

Received: 25 January 2017 Accepted: 04 February 2017

*Correspondence: Dr. K. Suresh Babu,

E-mail: sures8598@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Acute appendicitis is a common problem in children and early adult life. Appendicectomy is immediate or emergency procedure to reduce morbidity and mortality. The present study was conducted to find out clinical profile of acute appendicitis and complications of appendicectomy.

Methods: This observational study was conducted among 100 patients diagnosed as acute appendicitis in tertiary care hospital during the year from 2001 to 2002. The clinical profile like age, sex, symptoms of the patients and post-operative complications were recorded. All patients underwent appendicectomy and followed post operatively.

Results: Out of hundred patients, 55% were male and 45% were female. Nearly 71% of the patients belonged to the age group of 15-30 years.100% had pain abdomen, 81% had fever and 75% had vomiting. The post-operative complication was 3%.

Conclusions: Acute appendicitis is very common in younger age groups shows that whenever young patients present with acute abdominal pain may be considered acute appendicitis. The complication of appendicectomy is very minimum and gives good prognosis.

Keywords: Appendicitis, Post-operative, Retrocaecal

INTRODUCTION

The vermiform appendix is considered to be a vestigial organ, its importance in surgery due only to its propensity for inflammation which results in clinical syndrome known as acute appendicitis. Acute appendicitis is a common problem among older children and young adults. This problem occurs sudden in onset and warrants the patients to seek immediate health care.

Occasionally the perforation of appendix may produce life threatening situations. Several studies reported male predominance than female. Many patients have typical clinical symptoms like abdominal pain, fever and vomiting. Most of the times Appendicectomy reduces morbidity and mortality. In United States, 250,000 cases of appendicitis are reported annually.¹

The lifetime prevalence of acute appendicitis is approximately 7%.² Acute appendicitis is the most common cause of acute abdomen requiring surgical intervention during childhood, accounting for 1-8% of children who present to the paediatric emergency room with acute abdominal pain.³

The present study was conducted to find out the common symptoms, certain demographic profile and post-operative complication of acute appendicitis which may help in diagnosing and management of acute appendicitis.

METHODS

Descriptive study was done at government Royapettah Hospital, Kilpauk Medical College, Tamil Nadu, India.

100 Patients with diagnosis of acute appendicitis were taken for the study. Study duration was 2001 to 2002.

The study was conducted among randomly selected 100 patients with acute appendicitis diagnosed with the help of clinical examination and other investigation like ultrasonogram. The clinical symptoms were recorded, certain demographic profile like age and sex were collected. All the 100 patients were underwent appendicectomy and followed in the hospital for immediate complication and also followed for remote complications. All patients have received 3 to 7 days antibiotics, and regular treatment. Appropriate treatment was given wherever complication was noted.

RESULTS

Out of 100 patients, 55% were male and 45% were female. Nearly 71 % were belonged to the age group of 15-30 (Table 1). All 100 patients that is 100% had pain abdomen. About 81% had fever and 75% had vomiting.

Table 1: Distribution of age and sex of the study population (N = 100).

Age (years)	Male	Female	Total	Percentage
0-14	06	06	12	12
15-30	41	30	71	71
31-46	07	08	15	15
46-61	01	00	01	01
Above 62	00	01	01	01
Total	55	45	100	100

Table 2: Distribution of position of appendix.

Position	Number	Percentage
Retrocaecal	82	82
Pelvic	11	11
Postileal	03	03
Preileal	02	02
Paracolic	01	01
Sub caecal	01	01
Total	100	100

The position of the appendix during the surgery nearly 82% of the position of appendix was retrocaecal (Table 2). 94% of appendixes were inflamed and 4% were perforated and 2% were gangrenous. About 19% of the patients developed fever after the surgery and 3% were developed post-operative complications. Among 3 patients one patient had wound infection, one patient had wound infection and wound gaping and another patient had wound infection, wound gaping and small bowl obstruction. All these patients were treated appropriately and discharged in good condition. No delayed complications were observed in follow up of the patients. The mortality was not observed in this study. The proteus organisms, pseudomonas organisms were found in wound infections.

DISCUSSION

The present study was conducted among 100 patients diagnosed as acute appendicitis and observed that male were more in number (55%) than female shows that male predominance in acute appendicitis is one of the notable factor which is similar to 60% in male in a study conducted by Chaudhar YP et al in Maharastra, India.⁴

This study has found out that most of the sufferer were in the age group of 15 to 30 years which is supported by a study conducted by Pralhad Y.⁴ The present study has observed that Pain abdomen was in 100%, fever was in 81% and vomiting in 75% of the patients which is almost close to 99%, 76% and 56% respectively, a study conducted by Kamath P et al.⁵

The position of appendix was also observed in this study and found out that 82% of the appendix were in retrocecal in position that means most of the time appendix present in retrocaecal and 11% in pelvic in position which is supported by 57% retrocecal and 25% pelvic a study conducted by Salwe NA.⁶

This study has noticed that 3% of the patients had postoperative complication and also were mostly due to wound infection, wound gaping, adhesive small bowl obstruction which is little lower to 11% in a study conducted by Jess P 7.19% of the patients have developed fever postoperatively and may be due to various reasons like urinary tract infection or respiratory tract infections also.⁷

The limitations of the study was size of the sample which is little low and if larger sample may show minimal variations.

ACKNOWLEDGEMENTS

The authors would like to thank Dr. P. K. Govindarajan, Professor and Head, Community Medicine RMMC for his guidelines in publication of the paper

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

institutional ethics committee

REFERENCES

- Lohar HP. Epidemiological aspects of appendicitis in a rural setup. Medical J DY Univ. 2014;7(6):753-7
- Brunicardi FC, Andersen DK, Billiar TR. The appendix. In: Schwartz's principles of surgery. 9th Edition. New York, NY: McGraw-Hill. 2012:2043-67.
- 3. Rothrock SG, Pagane J. Acute appendicitis in children: emergency department diagnosis and management. Ann Emerg Med. 2000;36:39-51.

- 4. Chaudhari YP, Jawale PG. Prevalence of appendicitis at surgery inpatient department of a tertiary care hospital: a descriptive study. Int Med J. 2015;2(11):768-70.
- 5. Kamath P. A clinico pathological study of appendisectomy cases in a tertiary care hospital in South India. Indian J Applied Research. 2015;5(9):285-6.
- 6. Salwe NA, Kulkarni PG, Sinha RS. Study of morphological variations of vermiform appendix and caecum in cadavers of western Maharashtra
- region. Int J Advanced Physiology Allied Sci. 2014;2(1):31-41.
- 7. Jess P, Bjerregaard B, Brynitz S, Christensen J, Kalaja E. Acute appendicitis: prospective trial concerning diagnostic accuracy and complications. Am J Surg. 1981 Feb;141(2):232-4.

Cite this article as: Babu KS, Savitha S. A study on acute appendicitis in a tertiary care hospital in Tamil Nadu, India. Int Surg J 2017;4:929-31.