

Original article:

A study of demographic profile of appendicitis and distribution of position of appendix in a tertiary care hospital in rural Ahmednagar District

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ABSTRACT:

Background: Appendicitis is a common problem in children and early adult life. Appendectomy can significantly reduce morbidity and mortality. The present study was conducted to find out demographic profile of appendicitis and also distribution of position of appendix as found during surgery.

Materials and methods: A total of 127 cases were studied, Sixty cases are from the prospective study over a period of one and half years between May 1991 to October 1992 and sixty seven cases are from retrospective study of cases prior to this period.

Results: The most common age group of appendicitis is third decade with male predominance in our study. The position of appendix found during surgery in our cases were mostly retrocaecal.

Conclusion: In a young patient with abdominal emergency, appendicitis has to be ruled out.

Keywords: Appendix, Appendicitis, Retrocaecal

INTRODUCTION:

The vermiform appendix, a vestigial organ, has propensity for inflammation which results in clinical syndrome known as acute appendicitis. 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. It has life time risk of 6%¹ Appendicitis tops the list of abdominal emergencies and appendectomy is indisputably the commonest of all abdominal operations. Most of the times Appendectomy reduces morbidity and mortality.

In United States, 250,000 cases of appendicitis are reported annually.² Several studies reported male predominance than female.³ Appendicitis accounts to 1-8% of children who present to the paediatric emergency room with acute abdominal pain.⁴

The Present study provides us the insight of the demographic profile of age and sex of the patients with appendicitis and also distribution of position of appendix.

MATERIALS AND METHODS:

This is a study of cases of clinically diagnosed appendicitis and operated in a tertiary care hospital

in Rural Ahmednagar, India. Out of 127 cases, Sixty cases are from the prospective study over a period of one and half years between May 1991 to October 1992 and sixty seven cases are from retrospective study of cases prior to this period.

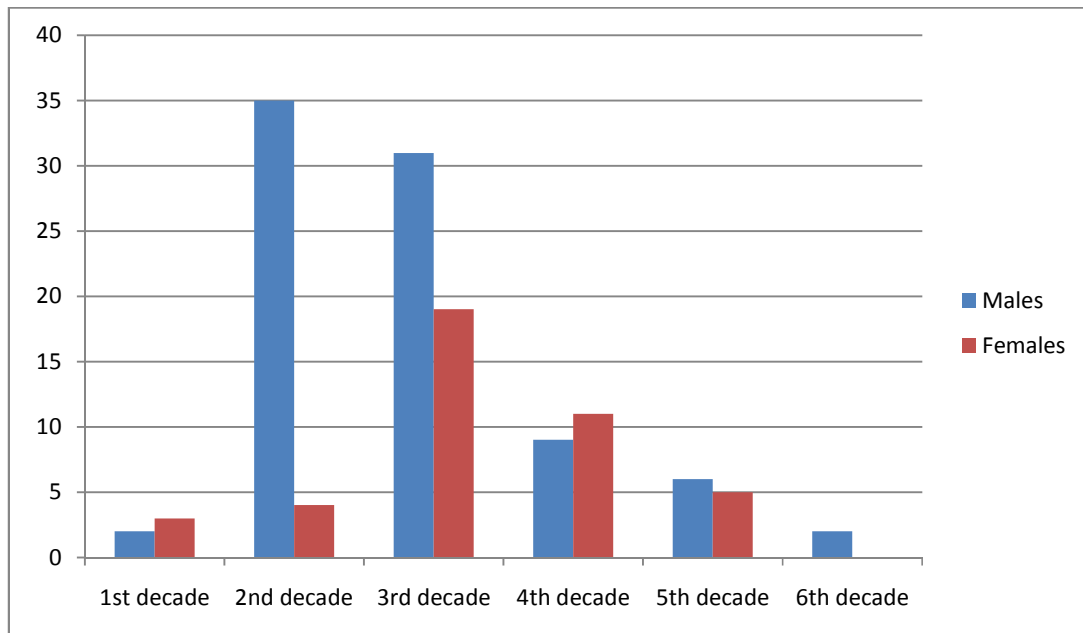
Overall correlation of the clinical assessment with histopathological examination was carried out in each case.

RESULTS:

Table 1: Age and sex incidence of patients with appendicitis

Age group (years)	Males	Females	Total
1-10	2	3	5
11-20	35	4	39
21-30	31	19	50
31-40	9	11	20
41-50	6	5	11
51-60	2	0	2
Total	85	42	127

Bar diagram 1: Age and sex incidence of patients with appendicitis



In our study we had patients ranging in age from five year old boy to couple of adults in sixth decade of age.

The incidence of the disease shows a sharp increase during the second decade of life, coming to a peak during the third decade and

then declining progressively with increasing age (Table 1, Bar diagram 1).

Total number of male patients were 85, which is 66.9% of the total number of cases studied

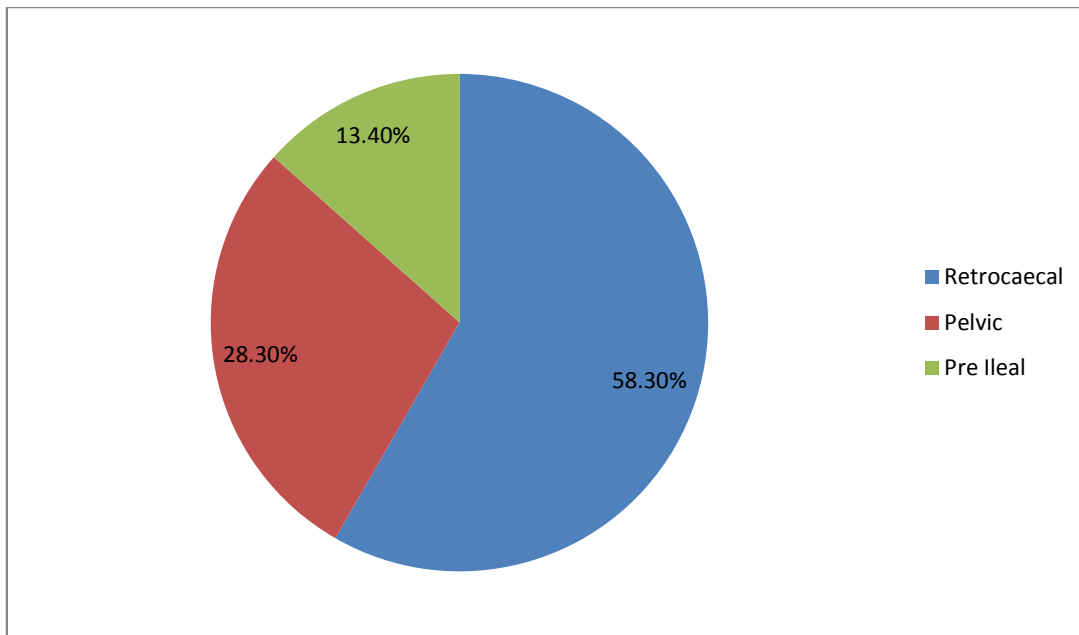
and total female patients were 42 (33.1%). The male-female ratio of incidence thus comes to 2:1, suggesting that males are more prone to this disease (Table 1, Bar diagram 1).

Table 2: Distribution of position of appendix in our study

Position of appendix	Number of cases	%
Retrocaecal	74	58.3
Pelvic	36	28.3
Pre Ileal	17	13.4
Total	127	100

The position of appendix was mostly retrocaecal (58.3%) as found during surgery, followed by, pelvic (28.3%) and pre ileal (13.4%) (Table 2 and Pie chart 1).

Pie Chart 1: Distribution of position of appendix in our study



DISCUSSION:

The diagnosis of appendicitis requiring appendectomy is still a challenging task even though it is a common surgical operation at the turn of the century. Appendectomy for acute appendicitis can significantly reduce the morbidity and mortality.

The present study conducted among 127 appendicitis patients showed the incidence of the disease with a sharp increase during the second decade of life, coming to a peak during the third decade and then declining progressively with increasing age with notable male predominance with male to female ratio of 2:1. This in agreement with studies done by

Babu KS et al⁵, Yogesh PC et al⁶ and Sharma S et al⁷. However, study done by Dr. Mani TM et al⁸ showed a contradictory female predominance of cases which may be accounted to the small sample size of their study undertaken.

The vermiform appendix represents the original apex of the caecum. Due to asymmetrical growth of the caecum during development, position of appendix is not uniform in all subjects. The position of appendix during surgery was mostly

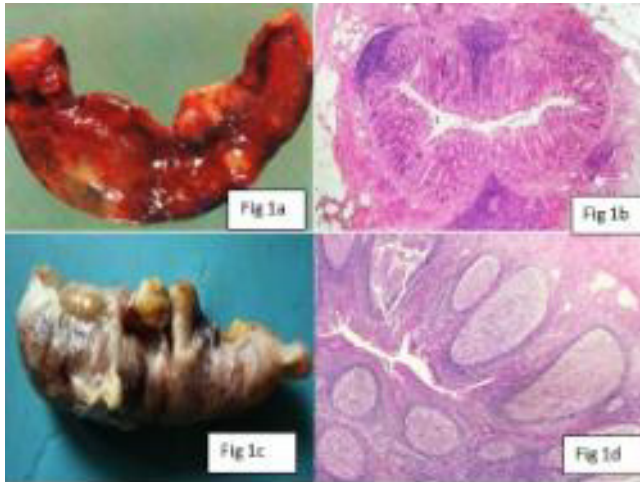
retrocaecal which is in concordance with study done by Babu KS et al⁵

CONCLUSION:

The most common age group of appendicitis is third decade with male predominance in our study. The position of appendix found during surgery in our cases was mostly retrocaecal. This suggests that in young patient of abdominal emergency appendicitis has to be ruled out. Appendectomy has minimum complication with maximum prognosis.

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