

# Prevalence of appendicitis at surgery inpatient department of a tertiary care hospital: A descriptive study

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## Abstract

**Introduction:** The vermiform appendix is considered by most to be a vestigial organ; its importance in surgery results only from its propensity for inflammation, which results in the clinical syndrome known as acute appendicitis. Acute appendicitis is one of the commonest causes of acute abdomen encountered in surgical practice requiring emergency surgery. It has a life time risk of 6% **Aims and Objectives:** To study the prevalence and associated factors with appendicitis in inpatient department of surgery **Methodology:** This was a hospital based; descriptive study of the patients admitted to surgery inpatient department with Diagnosed as Appendicitis by Symptoms and Confirmed by Ultrasonography during year Jan 2013 to Jan 2014 of the 510 patients admitted to surgery department 110 were having appendicitis. That was confirmed by Ultrasonography. These patients were operated and confirmed by Histopathologically. All the necessary information was collected by pretested, semi-structured questionnaire. **Result:** The most common age for appendicitis was found to be 21-30 i.e. (34.54%) followed by 11-20 (26.36%), 31-40 (14.54%), 41-50(13.63%), 51-60 (6.33%). Proportion of the Male patients was more as compared to Females i.e. (60.00%) and (40.00%). The most common presenting complain was Pain in Abdomen (100%) followed by Fever (86.36%) Vomiting (54.54%). In histopathological diagnosis; the most common diagnosis was Acute Appendicitis (45.45%) followed by Resolving appendicitis (24.54%); Lymphoid hyperplasia (22.72%); Resolving appendicitis (24.54%). **Conclusion:** The most common age of appendicitis was 21-30 and male affected more than females in histological diagnosis the most common was acute appendicitis.

**Keywords:** Appendicitis, Descriptive study.


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## INTRODUCTION

The vermiform appendix is considered by most to be a vestigial organ; its importance in surgery results only from its propensity for inflammation, which results in the clinical syndrome known as acute appendicitis<sup>1</sup>. Acute appendicitis is one of the commonest causes of acute

abdomen encountered in surgical practice requiring emergency surgery. It has a life time risk of 6%<sup>2</sup>. In the general population it has an incidence of 86 per 100,000 population per year<sup>3</sup>. It has been observed that males had higher rates of appendicitis than females for all age groups with an overall ratio of 1.4:1<sup>4</sup>. The clinical diagnostic criteria as a classical signs and symptoms of acute appendicitis as a disease entity<sup>5</sup>. was first reported by Reginald Heber Fits in 1886. Still acute appendicitis has remained the most common acute surgical condition of the abdomen in all ages and evidently a common disease in surgical practice<sup>6</sup>. Even after a long period of about more than 120 years from its first depiction this common surgical disease continues to remain a diagnostic problem and can confuse most of the clinicians. Delay in diagnosis definitely increases the morbidity, mortality, and expenditure of management and in equivocal cases, destructive surgical approach too. Although being so

common its diagnosis still remains challenge<sup>7,8</sup>. Leading to a negative appendectomies rate 20-40%<sup>5</sup>. In spite of advanced diagnostic modalities its diagnosis is mainly clinical one. Various protocols have been introduced and tested by different researchers which include Lidverg, Fenyo, Christian, Ohman and Alvarado scoring system to make an early diagnosis of appendicitis<sup>9</sup>.

### AIMS AND OBJECTIVES

To study the prevalence and associated factors with appendicitis in inpatient department of surgery.

### MATERIAL AND METHODS

This was a hospital based; descriptive study of the patients admitted to surgery inpatient department with Diagnosed as Appendicitis by Symptoms and Confirmed by Ultrasonography during year Jan 2013 to Jan2014 of the 510 patients admitted to surgery department 110 were having appendicitis. That was confirmed by Ultrasonography. These patients were operated and confirmed by Histopathologically. All the necessary information was collected by pretested, semi-structured questionnaire.

**Table 1:** Age wise Distribution of the Appendicitis patients

Age group	No. (%)
<10	5 (4.5%)
11-20	29 (26.36%)
21-30	38(34.54%)
31-40	16(14.54%)
41-50	15(13.63%)
51-60	7(6.33%)
<b>Total</b>	<b>110(100%)</b>

Form **Table 1:** The most common age for appendicitis was found to be 21-30 i.e. (34.54%) followed by 11-20 (26.36%), 31-40 (14.54%).41-50 (13.63%), 51-60 (6.33%).

**Table 2:** Sex wise Distribution of the Appendicitis patients

Total	No (%)
Male	66 (60.00%)
Female	44(40.00%)
<b>Total</b>	<b>110(100%)</b>

Proportion of the Male patients was more as compared to Females i.e. (60.00%) and (40.00%).

**Table 3:** Distribution of the patients as per the most common Presenting clinical feature

Presenting clinical feature	No. (%)
Pain in Abdomen	110 (100%)
Fever	95 (86.36%)
Vomiting	60 (54.54%)

The most common presenting complain was Pain in Abdomen (100%) followed by Fever (86.36%) Vomiting (54.54%).

**Table 4:** Distribution of the patients as per the Histopathological diagnosis

Histo-pathological Diagnosis	No. (%)
Acute Appendicitis	50(45.45%)
Acute appendicitis with periappendicitis	3(2.72%)
Chronic appendicitis	5(4.54%)
Lymphoid hyperplasia	25(22.72%)
Resolving appendicitis	27(24.54%)
<b>Total</b>	<b>110(100%)</b>

In histopathological diagnosis; the most common diagnosis was Acute Appendicitis (45.45%) followed by Resolving appendicitis (24.54%); Lymphoid hyperplasia (22.72%); Resolving appendicitis (24.54%).

### DISCUSSION

The diagnosis of acute appendicitis still remains a challenging task for surgeons. A negative rate of appendisectomies of 20%-40% is not an unusual finding in surgical literature<sup>10</sup>. Negative appendisectomies rate in this study was 19 %.The percentage of normal appendisectomies in various series varies from 8-33%.<sup>13,14,15</sup> In a study, Lone *et al*<sup>16</sup> observed negative appendisectomies rate was 17%. In a prospective study of 215 adults and children, use of Alvarado score decrease an unusually high false positive appendisectomies rate of 44% to 14%, For the entire modern Era of surgery many surgeons opined that maximum 15-20% negative appendesectomies are acceptable<sup>15</sup> Removal of normal appendices is expected to lower the rate of perforation and consequent mortality. On the other hand unnecessary appendectomies carry long term risks to the patients<sup>12</sup>. The most common age for appendicitis was found to be 21-30 i.e. (34.54%) followed by 11-20 (26.36%), 31-40(14.54%). 41-50 (13.63%), 51-60 (6.33%). Some studies have shown that appendicitis is more common in 10-29 years of age group<sup>10</sup>.Males are more susceptible than females<sup>11</sup>.

### CONCLUSION

The most common age of appendicitis was 21-30 and male affected more than females in histological diagnosis the most common was acute appendicitis.

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