

# A Descriptive Study to Assess the Prevalence of Appendicitis in a Known Population

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## ABSTRACT

**Background:** Acute appendicitis is the most common surgical disease, and appendectomy is the treatment of choice in the majority of cases. The present study was conducted to assess the prevalence of Appendicitis in a known population.

**Materials and Methods:** The present study was conducted among 140 patients of age group 20-60 years. The patient who were diagnosed as Appendicitis by symptoms and confirmed by ultrasonography over the period of 6 months. These patients were operated and confirmed by histopathologically. All the necessary information was collected by pretested, semi-structured questionnaire.

**Results:** In the present study proportion of male patients (53.57%) was more as compared to females (46.4%). The most common age for appendicitis was found to be 20-30 i.e. (45%) followed by 31-40 (25%), 41-50 (20%), 51-60 (10%). The most common presenting complain was Pain in Abdomen (100%) followed by Fever (75.71%), Vomiting (52.14%). In histopathological diagnosis the most common diagnosis was Acute Appendicitis (60%) followed by lymphoid hyperplasia (30%).

**Conclusion:** Our study concluded that males were affected

more by appendicitis, most common age for appendicitis was 20-30 years, the most presenting complain was pain in abdomen and histological diagnosis shows that acute appendicitis was most common.

**Keywords:** Acute Appendicitis, Lymphoid Hyperplasia, Chronic Appendicitis.


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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> The term "acute appendicitis" was introduced by Ringald H Fitz in 1886, who attributed the condition called typhlitis to the acute inflammation of the vermiform appendix.<sup>2</sup> Appendicitis is characterized histologically by the inflammation of the mucosa lining of the vermiform appendix which spreads to other anatomical parts of the appendix through the mechanism of venous stasis, organ ischemia and bacterial translocation leading to the development of different symptoms and signs elicited in the disease process.<sup>3</sup> In the general population it has an incidence of 86 per 100,000 population per year.<sup>4</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>5</sup> The present study was conducted to assess the prevalence of Appendicitis in a known population.

## MATERIALS AND METHODS

The present study was conducted among 140 patients of age group 20-60 years. Before the commencement of study ethical approval was taken from the Ethical Committee of the institution. Written informed consent was obtained from the guardian. The patient who were diagnosed as Appendicitis by symptoms and confirmed by ultrasonography over the period of 6 months. These patients were operated and confirmed by histopathologically. All the necessary information was collected by pretested, semi-structured questionnaire.

## RESULTS

In the present study proportion of male patients (53.57%) was more as compared to females (46.4%). The most common age for appendicitis was found to be 20-30 i.e. (45%) followed by 31-40 (25%), 41-50 (20%), 51-60 (10%). The most common presenting complain was Pain in Abdomen (100%) followed by Fever

(75.71%) Vomiting (52.14%). In histopathological diagnosis the most common diagnosis was Acute Appendicitis (60%) followed by Lymphoid hyperplasia (30%).

**Table 1: Distribution according to gender**

Gender	n(%)
Male	75(53.57%)
Female	65(46.42%)
Total	140(100%)

**Table 2: Distribution according to age**

Age group	n(%)
20-30	63(45%)
31-40	35(25%)
41-50	28(20%)
51-60	14(10%)
Total	140(100%)

**Table 3: Distribution according to most common presenting clinical symptom**

Presenting clinical symptom	n(%)
Fever	106(75.71%)
Vomiting	73(52.14%)
Pain in abdomen	140(100%)
Total	140(100%)

**Table 4: Distribution according to histopathological diagnosis**

Histopathological diagnosis	n(%)
Acute appendicitis	84(60%)
Acute appendicitis with periappendicitis	6(4.28%)
Chronic appendicitis	8(5.71%)
Lymphoid hyperplasia	42(30%)
Total	140(100%)

**DISCUSSION**

Appendicitis, a disease thought to have multiple etiological factors, has an intriguing epidemiology.<sup>6</sup> Acute appendicitis is one of the most commonly occurring clinical challenges for emergency surgeons, because of its diagnostic work-up. The clinical presentation of Acute Appendicitis may vary widely from mild symptoms, like moderate abdominal pain or fever, to most severe scenarios, such as diffuse peritonitis and sepsis.<sup>7</sup>

In the present study proportion of male patients (53.57%) was more as compared to females (46.4%). The most common age for appendicitis was found to be 20-30 i.e. (45%) followed by 31-40 (25%), 41-50 (20%), 51-60 (10%). The most common presenting complain was Pain in Abdomen (100%) followed by Fever (75.71%) Vomiting (52.14%). In histopathological diagnosis the most common diagnosis was Acute Appendicitis (60%) followed by Lymphoid hyperplasia (30%).

A study conducted by Al-Omran on epidemiological features of acute appendicitis showed that appendicitis is more common in males, in those aged 11-20 years.<sup>8</sup> A study conducted by Nuddeh et al showed that appendicitis is more common in males, in those aged 21-30 years whereas in females the highest occurrence was observed in 11-20 years of age group.<sup>9</sup>

**CONCLUSION**

Our study concluded that males were affected more by appendicitis, most common age for appendicitis was 20-30 years, the most presenting complain was pain in abdomen and histological diagnosis shows that acute appendicitis was most common.

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