

Original article:

Study of demographic profile of acute appendicitis in Rural Population

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Abstract:

Introduction: One of the commonest clinical presentations that require emergency surgery is acute appendicitis ^(4,5). It is rare in infancy and amongst the elderly, but is common in children, teenagers and young adults ⁽⁶⁾. Much effort has been directed towards early diagnosis and intervention as approximately 6% of the population will suffer from this disease during their life time

Methodology: It was prospective clinicopathological study with 100 patient sample size conducted at Pravara Rural Hospital and Rural Medical College, PIMS , Loni . Institutional ethical committee clearance were taken before commencement of the study . Written and informed consent were taken for open appendectomy. This study included randomly all operated patients(100)suspected of acute appendicitis between June 2012 to October 2014 in the Department Of Surgery.

Results : Among 100 cases of operated appendectomy in this study patients age group ranged from 0-10 to 70 years. Maximum group of patients belonged to 21 to 30 years(33 patients i.e,33%)

Conclusion: Appendicitis is more common in age group 21 to 30 i.e adolescents and young adults with a male to female ratio is 1.8 to 1.

Introduction:

One of the commonest clinical presentations that require emergency surgery is acute appendicitis ⁽¹⁾. It is rare in infancy and amongst the elderly, but is common in children, teenagers and young adults ⁽²⁾. Much effort has been directed towards early diagnosis and intervention as approximately 6% of the population will suffer from this disease during their life time ⁽¹⁾. Delay in diagnosis leads to increase morbidity and costs. In 1880, Robert Lawson Tait⁽⁸⁾ performed the first appendectomy for appendicitis in England. Appendectomy is the commonest emergency operation done in surgical practice. (Busuttil.R.W, 1980)^(3,4). The usual picture of appendicitis is often not classical, leaving many cases a diagnostic problem. It is well known fact that nothing can be so easy, or so difficult, as the diagnosis of appendicitis, it is because the clinical features and special investigations which are all nonspecific and the list of differential diagnosis are too long. Again the diagnosis is particularly difficult in women of reproductive age group and elderly adults due to associated gynecological problems and uncharacteristic abdominal pains respectively.

Methodology:

It was prospective clinicopathological study with 100 patient sample size conducted at Pravara Rural Hospital and Rural Medical College, PIMS , Loni . Institutional ethical committee clearance were taken before commencement of the study . Written and informed consent were taken for open appendectomy. This study included randomly all operated patients (100) suspected of acute appendicitis between June 2012 to October 2014 in the Department Of Surgery.

Patients selection:

Inclusion criteria:

- 1.All patients with right iliac fossa pain clinically suggestive of appendicitis.
- 2.All patient with right iliac fossa pain with raised total leukocyte count,neutrophil count and C-reactive protein.
- 3.All patients with right iliac fossa pain suggestive of appendicitis on ultra sonography.

Exclusion criteria:

1. Patient in whom diagnosis of appendicitis was not clinically established
2. Patients in whom palpable mass was present in right iliac fossa due to complication of acute appendicitis(appendicular lump)
3. Patients with past history of documented appendicitis and treated conservatively.
4. Pain in RIF with pregnancy, immunocompromised status, pre existing disease and patients suffering from other acute inflammatory condition.

Observations and results :

Table no.1Age Distribution

Age in years	NO. OF PATIENTS	Percentage
0-10	15	15%
11-20	28	28%
21-30	33	33%
31-40	10	10%
41-50	8	8%
51-60	3	3%
61-70	3	3%
Total	100	100%
Mean ± SD	23.90±5.69	

Among 100 cases of operated appendectomy in this study patients age group ranged from 0-10 to 70 years. Maximum group of patients belonged to 21 to 30 years(33 patients i.e,33%)

Table no.2Sex Distribution:

SEX	NO. OF PATIENTS	PERCENTAGE%
MALE	65	65%
FEMALE	35	35%
TOTAL	100	100%

Among 100 patients of operated appendectomy in this study,35 were female(35%)and 65were male (65%).

Table no. 3 HPE Findings:

TOTAL NO. OF CASES	100	PERCENTAGE%
HPE POSITIVE	84	84%
HPE NEGATIVE	16	16%

Out of total 100 operated patients 84 patients diagnosed as HPE positive (appendicitis)i.e. 84%

Rest 16 patients had HPE negative (normal appendix)i.e,16%.

The negative appendectomy rate in this study is 16%

Out of total 100 cases 84 were HPE positive and 16 patient were HPE negative.

Out of total 84 HPE positive(appendicitis) patient 55 were male(65.4%) and 29 were female(34.5%)

Out of 16 HPE Negative(normal appendix) patients 10 were male(62.5) and 06 were female(37.5%)

Discussion:

This study was done in Department of General Surgery, Pravara Institute Of Medical Sciences, Rural Medical College from August 2012 to October 2014. A total of 100 patient were included in this study. Out of 100 patient 35 were female and 65 were male. Maximum group of people belong to 21 to 30 years (33 patients) i.e. 33%. Appendicitis is mainly a disease of adolescents and young adults⁽⁵⁾. Clinical diagnosis was found to be correct in 84% of cases and negative appendectomy rate was 16% in this study. This is comparable with the study done by Erikson⁽⁶⁾ (14%) and Gurleyik (16%)⁽⁷⁾. A high degree of accuracy is required to reduce the incidence of negative appendectomies which still remain around 20%⁽⁸⁾.This was comparable with study done by Khan MN et al⁽⁹⁾ and Asfar S et al⁽¹⁰⁾.

Conclusion:

Appendicitis is more common in age group 21 to 30 i.e adolescents and young adults with a male to female ratio is 1.8 to 1.

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