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RESEARCH ARTICLE
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CLINICAL PROFILE OF PATIENTS WITH ACUTE APPENDICITIS ADMITTED AT A TERTIARY CARE HOSPITAL

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Abstract:
With the modernization and industrialization, more and more people have been adopting a way of life mimicking the western population. The change in the way of life, the effect of the western culture on the eastern population has led to a lot of changes in their diet and is the leading cause behind predisposition to appendicitis. The incidence of the disease is said to be higher with the increase in the socio economic status, among all the diseases; the one of the rare diseases which increases with economic growth. Migration from the rural areas to the urban areas has been implicated in the etiology of appendicitis. Patient diagnosed with acute appendicitis which includes clinical and radiological were chosen. The patients were briefed regarding the study methodology and the purpose of the study. Those willing underwent a detailed evaluation after taking a written consent. 41.30% were males and 58.70% were females . We noted that all cases had a clinical diagnosis of the acute appendicitis.

Keywords: Acute appendicitis, Age, Gender

Introduction:

Acute appendicitis is seen most frequently in the American Australian, new Zealanders, Canadian race as compared to the black race of South Africa Asia and Central Africa.[1]

As compared to the European population Asian population has the higher prevalence of acute appendicitis. Two common reasons showed as contributing in developing acute appendicitis is the fact that the people from Asian and African regions have a higher tendency to travel and settle in other areas that results in a change in the diet and hence acute appendicitis. It is also seen that prevalence of appendicitis is less in those races that have a higher intake of bulk cellulose habitually.[2]

Among all the causes for the acute appendicitis, the predominant predisposing factor is the change in the diet of the individual. With the modernization and industrialization, more and

more people have been adopting a way of life mimicking the western population. The change in the way of life, the effect of the western culture on the eastern population has led to a lot of changes in their diet and is the leading cause behind predisposition to appendicitis.
The incidence of the disease is said to be higher with the increase in the socio economic status, among all the diseases; the one of the rare diseases which increases with economic growth. Migration from the rural areas to the urban areas has been implicated in the etiology of appendicitis.[4]
In general, is it has been stated that whenever there is a diet that has low content of fiber, its said to have greater chance of appendicitis. This is the reason why developed countries have greater prevalence of appendicitis and rural inhabitants have a lesser incidence of appendicitis.[5]
There is evidence to state that that appendicitis can also run-in families and when closely related individuals were operated it was noted that the cause of appendicitis was an abnormal band of tissue that that arise from base appendix and attached to the lateral aspect of the caecum which leads to Kinking of the base.[6]

Methodology:
Source of data
Radiological findings of fecaliths.
Intra op findings of fecaliths.
Histopathological evidence of fecaliths.
Case Performa.

Study Design: Observational study
Sampling technique: Purposive sampling method Sample Size: 150
Patient diagnosed with acute appendicitis which includes clinical and radiological were chosen.
The patients were briefed regarding the study methodology and the purpose of the study.
Those willing underwent a detailed evaluation after taking a written consent.
The following routine pre-operative investigations were noted-Hemoglobin (g/dL), Total counts, Differential counts, ESR, S. albumin.
Intra-operatively following the exposure of appendix, an evaluation of the appendix were done were done where the base of appendix is felt/look for any presence of fecaliths.Following removal of the appendix, the lumen of the appendix is looked for any presence of the fecaliths
The excised appendix is then sent histopathology to visualise the fecaliths.

Inclusion Criteria All Age groups diagnosed with acute appendicitis.
All consenting patients undergoing laparoscopic/open appendicectomy

Exclusion criteria
Intraoperative and histopathological findings of normal appendix.

Results:

Table 1: AGE

AGE	CASE NUMBER	PERCENT
LESS THAN 20	27	18.00%
21-30 YEARS	52	34.67%
31-40 YEARS	27	18.00%
41-50 YEARS	18	12.00%
51-60 YEARS	26	17.33%
TOTAL	150	100.00%

Based on the table and graph we noted that the 27 (18.00%) cases were less than 20 years of age , 52 (34.67%) of the cases in the study 21-30 years , ,27 (18.00%) of the cases in the

study 31-40 years , 18 (12.00%) of the cases in the study 41-50 years
, 26 (17.33%) of the cases in the study 51-60 years,

Table 2: GENDER

GENDER	CASE	PERCENT
FEMALE	62	41.30%
MALE	88	58.70%

Based on the table, we noted that the 41.30% were males and 58.70% were females .

Table 3: PRESENTING COMPLAINT

PRESENTING COMPLAINT	CASE NUMBER	PERCENT
ABDOMINAL PAIN	150	100.00%
VOMITING	68	45.30%
NAUSEA	18	12.00%
FEVER	21	14.00%

Based on the table,we noted that the all 100% had abdominal pai

Table 4: CLINICAL DIAGNOSIS

CLINICAL DIAGNOSIS	CASE NUMBER	PERCENT
ACUTE APPENDICITIS	150	100.00%

Based on the table, we noted that all cases had a clinical diagnosis of the acute appendicitis

Discussion:

In the present on evaluation of the gender distribution of the cases in the study we found that we had 41.30% were males and 58.70% were females .

Chenna Krishna Reddy Chada[7] had 85 females (42.5%) and 115 males (57.5%) with male to female ratio 1.35:1. Albulim and talukder also had a male dominance.

Zakaur rab siddiqui et al[8] in a study (70 males and 64 females) patients.

Rajashekar Jade et al[9] in a study found that of 150 patients hospitalized with appendicitis. Majority of the patients in the 21 to 30 years decade (44%), and later by the second decade (29%).In the present on evaluation of the age distribution of the cases in the study we found it was most common between the age of 21-30 years with 44 cases, 1 with mean age 28.7 years SD ±11.18 years.

Chenna Krishna Reddy Chada[7] et al, the mean age and standard deviation of cases in the present study was 34.26±8.64 years, most of the patients of this study were between 26-35 years of age which coincides with the findings the present study.

Zakaur Rab Siddiqui[8] et al in 70 patients with suspected acute appendicitis were included in the study (mean age 28.7 ± 11.9 years). These findings are similar to our study. Anita Samraj[10] et al in a study found that acute appendicitis is more common in males and the commonest age group affected is 21 - 30 years.

Rajashekar Jade et al[9] in a study found that out of 150 patients hospitalized with appendicitis males were 92 cases, male: female ratio was 3:2.

In the present study on evaluation of the symptoms distribution of the cases in the study we found abdominal pain 1009.00%In Chenna Krishna Reddy Chada[7] et al study, in 100 cases, rebound tenderness in right iliac fossa was present, it also described migratory pain in RIF as the commonest symptom. The most common sign was tenderrness in the RIF.

Anita Samraj[10] et al in a study found that right iliac fossa pain is the most common presenting symptom followed by nausea/vomiting.

Chenna Krishna Reddy Chada et al[7] in their study of 160 cases operated, 142 cases (88.75%) were confirmed as acute appendicitis and 18 cases (11.25%) were negative. The negative appendectomy rate was (11.25%) in the study. In our study we had no negative appendectomy.

Conclusion:

41.30% were males and 58.70% were females .

We noted that all cases had a clinical diagnosis of the acute appendicitis

References:

1. Tang SX, Sun YH, Zhou XR, Wang J. Bowel mesentery (meso-appendix) microcystic/reticular schwannoma: case report and literature review. World Journal of Gastroenterology: WJG. 2014 Feb 7;20(5):1371-1375.
2. Weyers W. Joseph von Gerlach—A Reminder of One of the Pioneers of Histochemistry on the Occasion of His 200th Birthday. The American Journal of Dermatopathology. 2020 Oct 1;42(10):731-738.
3. Iqbal T, Rabnawaz AI, Tahir F, Zaman S. A meta-analysis of history and functions of vermiform appendix. Pak J Surg. 2011;27(4):316-320.
4. Laissue JA, Gebbers JO. The intestinal barrier and the gut-associated lymphoid tissue. InGut-Derived Infectious-Toxic Shock (GITS). Karger Publishers.1992;59:19-43.
5. Cakmak YO, Ergelen R, Ekinci G, Kaspar EC. The short appendix vermiformis as a risk factor for colorectal cancer. Clinical Anatomy. 2014 Apr;27(3):498-502.
6. Koster H, Weintrob M. The blood supply to the appendix. Archives of Surgery. 1928 Oct 1;17(4):577-586.
7. Chada CK, Malepati S, Kandati J, Satish S. Diagnosis and management of acute appendicitis by Alvarado scoring with ultrasonography as supportive tool. International Surgery Journal. 2017 Jul 24;4(8):2806-10.
8. Coyne JD. Lengthy appendices. Journal of clinical pathology. 2007 May 1;60(5):584-589.
9. Seal A. Appendicitis: a historical review. Canadian journal of surgery. Journal canadien de chirurgie. 1981 Jul;24(4):427-430.
10. Samaha AH, Tawfik AS, Abbas TO, Abdelhamid A. Megaloappendix: a case report. Case reports in surgery. 2011;2011(2) 1-4.