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THE ETIOCLINICAL PROFILE OF RECURRENT ABDOMINAL PAIN IN CHILDREN

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ABSTRACT

Objective: *In this study our main goal is to evaluate the etioclinical profile of recurrent abdominal pain in Children.* ***Method:*** *This prospective observational study was done in the tertiary medical college and hospital from September July 2018 to July 2019. A total of 102 consecutive children who fulfilled the inclusion criteria were considered in this study.* ***Result:*** *during the study, 25% had appendicectomy. Followed by 40% had tonsillectomy, 23% had frequent headaches. Also, functional abdominal pain (44.12%) followed by urinary tract infection (UTI) were (20.59%), peptic ulcer diseases were (13.73%), gastroesophageal reflux diseases were (11.76%), abdominal Tuberculosis were (5.88%), pelvic inflammatory diseases were (4.90%), cholecystitis were (1.96%), and abdominal migraine was (0.98%).* ***Conclusion:*** From our study we can say that, specific diagnosis is needed to be distinguished from anatomic, infectious, inflammatory, or metabolic causes of abdominal pain. A uniform management protocol should be developed for proper investigations to minimize the cost and for judicious use of drugs in order to help these children.

KEYWORD: *etioclinical profile, recurrent abdominal pain (RAP), functional abdominal pain*.

INTRODUCTION

Abdominal pain is perhaps the most common painful health problem in school-aged children. Children andadolescents with chronic abdominal pain pose unique challenges to their caregivers.[1] Despite decades of clinical observations resulting in numerous articles, books, and monographs, the subject of long-lasting constant or intermittent abdominal pain in childhood remains one of ambiguity and concern for most pediatric health care professionals. Recurrent abdominal pain (RAP) was originally defined about 50 years ago as three or more bouts of abdominal pain (belly ache) in children 4-16 years old over a three-month period severe enough to interfere with his/her activities.[2] 10% of school aged children get recurrent episodes of abdominal pain.[3]

This symptom complex was named as recurrent abdominal pain (RAP) syndrome and defined it as "at least three episodes of abdominal pain, severe enough to affect their activities over a period longer than three months".[4] RAP is reported in 10-12% of school aged children in developed countries.[2,4] Frequent abdominal pain is associated with increased psychological distress, especially with anxiety or depression.[5]

In this study our main goal is to evaluate the etioclinical profile of recurrent abdominal pain in Children.

Objective

General objective

- To evaluate the etioclinical profile of recurrent abdominal pain in Children.

Specific objective

- To detect clinical characteristics of patients.
- To identify diagnostic pattern of recurrent abdominal pain.

METHODOLOGY

Type of study	Prospective observational study.
Place of study	Tertiary medical college and hospital.
Study period	July 2018 to July 2019
Study population	102 children with history of recurrent abdominal pain who fulfilled the inclusion criteria were considered in this study.
Sampling technique	Purposive

Method

Each patient was evaluated carefully. A detailed history including presenting complaints, duration of symptoms, socioeconomic status, demographic profile, developmental, personal and family history, school performance and school absences were recorded. Initial evaluation of the patients by history and clinical examination was performed and recorded in patients' data collection sheet. Surgical and another specialist consultation was taken from the appropriate consultant whenever it was required.

Statistical analysis

Data were processed and analyzed using computer-based software SPSS (Statistical Package for Social Sciences) for windows version 22. Unpaired t-test was used to compare quantitative variables. Variables were expressed as range and mean ± SD. p value < 0.05 were taken significant. Students' t test, Pearson's correlation coefficient test, multivariate logistic regression analysis and Fisher's exact test as applicable.

RESULTS

In table-1 shows sociodemographic characteristics of the patients where maximum numbers of patients were in the age group 5-8 years (45%) followed by 9-12 years (35%). Out of 100 patients (62%) were male and 19 (38%) were female. The following table is given below in detail:

Table-1: Sociodemographic characteristics of the patients.

Age	**%**
5-8 years	45%
9—12 years	35%
13-16 years	20%
Gender	**%**
Male	62%
Female	38%

In figure-1 shows residential area of the patients where 80% patients belong to urban area. The following table is given below in detail.

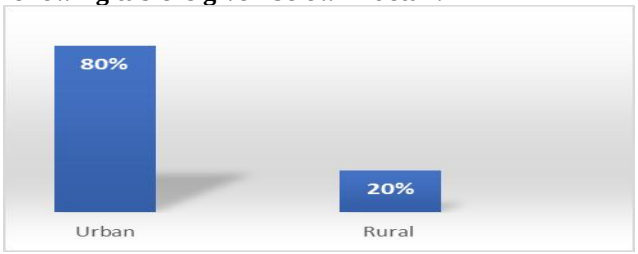

Figure-1: Residential area of the patients.

In In table-3 shows clinical characteristics of the patients where25% had appendicectomy. Followed by 40% had tonsillectomy, 23% had frequent headaches. The following table is given below in detail:

Table-3: Clinical characteristics of the patients.

Variable	**%**
Appendicectomy	25%
Tonsillectomy	40%
Frequent headaches	23%
Bilious attacks	10%
Habitual constipation	50%
Fits	5%
Asthma	2%
Family history	10%

In table-3 shows diagnostic pattern of recurrent abdominal painwhere majority had functional abdominal pain (44.12%) followed by urinary tract infection (UTI) were (20.59%), peptic ulcer diseases were (13.73%), gastroesophageal reflux diseases were (11.76%), abdominal Tuberculosis were (5.88%), pelvic inflammatory diseases were (4.90%), cholecystitis were (1.96%), and abdominal migraine was (0.98%).The following table is given below in detail:

Table-3: Diagnostic pattern of recurrent abdominal pain.

Variable	**%**
Functional abdominal pain	44.12%
Urinary tract infection (UTI)	20.59%
Peptic ulcer diseases	13.73%
Gastroesophagial reflux diseases	11.76%
Abdominal Tuberculosis	5.88%
Pelvic inflammatory diseases	4.90%
Cholecystitis	1.96%
Abdominal migraine	0.98%

In table-4 shows reports of electro encephalography where localized slow activity found in 5% in the patients. The following table is given below in detail:

Table-4: Reports of electro encephalography.

Variable	**%**
Normal	72%
Normal but immature for age	11%
Organic abnormality	2%
localized slow activity	5%
Focal spikes	4%
Epileptiform	10%

DISCUSSION

Abdominal pain is one of the most common symptoms in children and adolescents. Often, the pain may be due to a number of gastrointestinal (GI) or extra intestinal causes. One study defined the syndrome ofrecurrent abdominal pain in childhood as three episodes of abdominal pain occurring in the space of three months, severe enough to affect daily activities.[6] RAP is common in children, and affects about 10%-20% of school-going children.[7]

one study documented that, RAP in children in the middle of last century, noted that in the vast majority of cases, no organic causes could be found, and they considered the etiology of RAP to be psychogenic in origin.[8]

In this study, the diagnostic pattern of these 102 adolescents with recurrent abdominal pain revealed that majority had functional abdominal pain (44.12%) followed by urinary tract infection (UTI) were (20.59%), peptic ulcer diseases were (13.73%), gastroesophageal reflux diseases were (11.76%), abdominal Tuberculosis were (5.88%), pelvic inflammatory diseases were (4.90%), cholecystitis were (1.96%), and abdominal migraine was (0.98%).According to one report, functional abdominal pain disorders are a common problem worldwide. In their meta-analysis of total 58 articles, including 196,472 children he found that Worldwide pooled prevalence for functional abdominal pain disorders was 13.5% (95% CI 11.8-15.3). [9] The prevalence across studies ranged widely from 1.6% to 41.2%. in this study shows that functional abdominal painis the diagnosis of majority respondents (44.12%), which was supported by one study.[10]

In this study urinary tract infection is the second leading cause (20.59%) of recurrent abdominal pain among the children. According to one study between 2000 and 2005, the annual incidence of GERD among infants in the USA more than tripled (from 3.4% to 12.3%), and increased by 30-50% for children and adolescents.[11]

CONCLUSION

From our study we can say that, specific diagnosis is needed to be distinguished from anatomic, infectious, inflammatory, or metabolic causes of abdominal pain. A uniform management protocol should be developed for proper investigations to minimize the cost and for judicious use of drugs in order to help these children.

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