

THE ETIOCLINICAL PROFILE OF RECURRENT ABDOMINAL PAIN IN CHILDRENDr. Susanta Kumar Ghosh^{*1}, Dr. Santosh Kumar Saha² and Dr. Milia Islam³¹Associate Professor, Department of Pediatrics, Medical College for Women and Hospital, Uttara, Dhaka, Bangladesh.²Assistant Professor (Pediatric Cardiology), National Institute of Cardiovascular Diseases, Dhaka, Bangladesh.³Assistant Registrar, Department of Pediatric, Medical College for Women and Hospital, Uttara, Dhaka, Bangladesh.***Corresponding Author: Dr. Susanta Kumar Ghosh**

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ABSTRACT

Objective: In this study our main goal is to evaluate the etioclinal profile of recurrent abdominal pain in Children. **Method:** This prospective observational study was done in the tertiary medical college and hospital from September July 2016 to July 2018. A total of 102 consecutive children who fulfilled the inclusion criteria were considered in this study. **Results:** during the study patients functional abdominal pain found 28.12% followed by urinary tract infection (UTI) were 14%, appendicitis were 13.59%, peptic ulcer diseases were 10.73%, habitual constipation were 9%, gastroesophageal reflux diseases were 8.76%, tonsillitis were 6%, abdominal tuberculosis 5.8% and fits were 4%. **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. Because hard evidence on either aetiology or management remains scarce, clinicians must adopt a pragmatic approach. 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. Also, a symptom-based subclassification should be helpful in both clinical management and research.

KEYWORDS: Etioclinal profile, recurrent abdominal pain (RAP), functional abdominal pain.**INTRODUCTION**

Abdominal pain is perhaps the most common painful health problem in school-aged children. Children and adolescents 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 etioclinal profile of recurrent abdominal pain in Children.

Objective**General objective**

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

Specific objectives

- 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 2016 to July 2018
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 \pm 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:

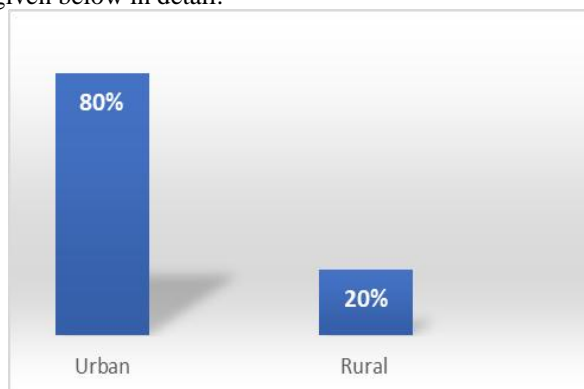


Figure 1: Residential area of the patients.

In In table-2 shows clinical characteristics of the patients where 44.12% had Functional abdominal pain. Followed by 25% had Urinary tract infection, 20.59% had appendicitis, 13.73% had Peptic ulcer diseases, 18% had habitual constipation, 11.76% had Gastroesophageal reflux diseases, 20% had tonsillitis and 5.88% had abdominal tuberculosis.

The following table is given below in detail:

Table 2: Clinical characteristics of the patients.

Variable	%
Functional abdominal pain	28.12%
Urinary tract infection (UTI)	14%
Appendicitis	13.59%
Peptic ulcer diseases	10.73%
Habitual constipation	9%
Gastroesophageal reflux diseases	8.76%
Tonsillitis	6%
Abdominal Tuberculosis	5.80%
Fits	4%

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 extraintestinal causes. One study defined the syndrome of recurrent 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 patients functional abdominal pain found 28.12% followed by urinary tract infection (UTI) were 14%, appendicitis were 13.59%, peptic ulcer diseases were 10.73%, habitual constipation were 9%, gastroesophageal reflux diseases were 8.76%, tonsillitis were 6%, abdominal tuberculosis 5.8% and fits were 4%. 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 pain is 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 (25%) 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]

In one report it was suggested that, the mainstay of treatment is reassurance with an emphasis on rehabilitation. Therefore, the first step is to acknowledge to the family and child that the pain is a real symptom. It is then necessary to recognize and treat any underlying or contributing factors, including a tendency to constipation. Avoid excessive medications such as non-steroidal anti-inflammatory drugs (NSAIDs). Promote a healthy diet and lifestyle. Assessment with a dietitian may be helpful. It is worthwhile identifying dietary triggers and suggesting alternatives.^[12]

Also, in another report I was said that, If the patient has an anxious temperament, consider psychological therapy. Many families are looking for an explanation for the symptoms and need to have discussed with them the inseparability of physical and psychological causes of symptoms. Rehabilitation should be goal-based, with simple targets such as optimizing school attendance, a graded exercise programme. The choice should be followed up until symptoms resolve and to give an opportunity for any psychiatric comorbidity to emerge.^[13]

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. Because hard evidence on either aetiology or management remains scarce, clinicians must adopt a pragmatic approach. 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. Also, a symptom-based subclassification should be helpful in both clinical management and research.

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