

Original Article

SOCIODEMOGRAPHIC AND CLINICAL PROFILE OF MESENTERIC LYMPHADENITIS AT TERTIARY CARE HOSPITAL

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ABSTRACT

Introduction: This study was conducted to know the etiological factors and distribution of mesenteric lymphadenitis in various age groups and sex, and to study patient's presentations and manifestations of mesenteric lymphadenitis.**Methods:** The study reports 100 cases of mesenteric lymphadenitis admitted at Smt. s. c. I. hospital, Ahmedabad, during November 07 to October 09.**Results:** More than 80% patients were between 1 to 20 years of age. Males are more affected than females, probably due to more prevalent yersinia infection in males. Fever and vomiting are common symptoms along with abdominal pain being constant symptom. In most of cases, aetiological factor remains unknown, although one should look for associated U.R.T.I., appendicitis or worm infestation.**Conclusion:** Mesenteric lymphadenitis should be considered a differential diagnosis in any patient of 20 years or less, with symptoms of abdominal pain, fever and vomiting. Association of mesenteric lymphadenitis with viral upper respiratory tract infections, worm infestations, tuberculosis and enteric fever suggest that community acquired infections play major role in developing the condition and maintaining proper hygiene and prompt treatment of the underlying condition will decrease the overall occurrence of the condition.**KEYWORDS:** mesentery, lymphadenitis, children, adolescent, abdominal pain, fever, vomiting

INTRODUCTION

Inflammation of lymph nodes in the mesentery of intestine is known as mesenteric lymphadenitis. This process may be acute or chronic depending upon causative factor. Mesenteric lymphadenitis is very common surgical problem particularly in children and young adults. Mesenteric lymphadenitis, a condition that has, it is true, been known since Sydenham's time or earlier, but now it has been recognized that there is a nontuberculous variety occurring with considerable frequency.¹ The aetiology often remains unknown, although some cases are associated with

Yersinia infection of the ileum. This self-limiting disease is never fatal but may be recurrent.² The true incidence of this disease is not known, because it can be easily missed or mistaken for other diagnoses. It causes clinical presentation that is often difficult to differentiate from acute appendicitis.³ Up to 20% of patients undergoing appendectomy have been found to have non-specific mesenteric lymphadenitis.⁴ So if properly diagnosed, many patients can be saved from undergoing negative appendectomy.

The purpose of this study is to know the etiological factors and distribution of mesenteric lymphadenitis.

phadenitis in various age groups and sex, and to study patient's presentations and manifestations of mesenteric lymphadenitis.

METHODOLOGY

A study of 100 cases, clinically suspected of suffering from mesenteric lymphadenitis, in whom, ultrasonographic findings suggestive of enlarged mesenteric lymph nodes with or without associated bowel pathology, admitted in department of surgery, Smt. s.c.l. hospital, Ahmedabad during November 07 to October 09 was conducted. Informed consent of the patients and patients' parents(if patient is younger than 18 years), were taken and approval from the local ethical comity was obtained regarding the study. Cases were examined clinically, biochemically and radiologically as indicated. After collecting proper and adequate data, results obtained in the form of age and sex wise distribution of the condition, clinical features and aetiology for the condition.

RESULTS

More than 80% patients were between 1 to 20 years of age, while after the age of 30 years the distribution of the condition is only 4%. In this study from total cases, males are more affected (>60%) than females.

Fever (>90%) and vomiting (>60%) are the most common associated symptoms along with abdominal pain being constant symptom. Cough was seen in more than 30% of patient which can be due to U.R.T.I. or pulmonary tuberculosis. In many cases of mesenteric lymphadenitis despite much investigation the aetiology often remains unknown. Upper respiratory tract viral infections secondarily infect mesenteric lymph nodes. Mesenteric lymph nodes are often secondarily inflamed in acute appendicitis. Reactive lymphadenitis is also seen in patients of worm infestations.

Table 1: Age and sex wise distribution of the cases.

Age groups	No. of patients (%)
1-10	24 (24.0)
11-20	59 (59.0)
21-30	13 (13.0)
31-40	4 (4.0)
Sex	
Male	62 (62.0)
Female	38 (38.0)
Total	100 (100.0)

Table 2: Presenting symptoms.

Symptoms	Patients (%)
Abdominal pain	100 (100.0)
Fever	91 (91.0)
Vomiting	64 (64.0)
Weight loss	13 (13.0)
Cough	31 (31.0)
Diarrhoea	15 (15.0)

Table 3: Underlying aetiological factors

Aetiology	Patients (%)
Idiopathic	29 (29.0)
U.R.T.I.	21 (21.0)
Worms	18 (18.0)
Tuberculosis	8 (8.0)
Appendicitis	19 (19.0)
Enteric fever	5 (5.0)
Total	100 (100.0)

DISCUSSION

Hundred cases of mesenteric lymphadenitis have been reported and discussed in this study. Although the appendix and small intestine have received more consideration as etiologic factors in the production of this condition, it is not unlikely that enlarged mesenteric lymph nodes are only a local manifestation of a generalized condition having its origin in an upper respiratory tract infection.

Patient may be completely free from pain between the attacks which usually last for 10 to 30 minutes.² The characteristic difference between pain of mesenteric lymphadenitis and acute appendicitis is that the pain of mesenteric lymphadenitis shifts to left iliac fossa, as patient turns to his or her left side. If vomiting is absent, it is more likely to be a case of mesenteric lymphadenitis than appendicitis.²

Frequent association of this condition especially in children with upper respiratory tract infections suggest viral aetiology of this condition.^{5,6} Viruses such as Coxsackie viruses(A & B) rubeola virus, and adenovirus serotype 1,2,3 & 7 have been implicated.⁶ Mesenteric lymph node involvement can also be the part of Epstein-barr virus infection, acute human immuno deficiency virus infection and cat scratch disease.^{7,8} Intestinal worms infestations, commonly ascariasis, giardiasis, and enterobiasis are associated with mesenteric lymphadenitis in many cases.^{9,10} Tuberculous bacilli usually, but not necessarily bovine, are ingested and enter the mesenteric lymph nodes by way of peyer's patches.² Tuberculous mesenteric lymphadenitis although less

common than idiopathic one can present with symptoms of general ill health, chronic abdominal pain, intestinal obstruction, pseudo mesenteric cyst.¹¹

The colicky nature of the abdominal distress, the multiplicity of attacks with relatively short duration and frequent association with an upper respiratory tract infection are outstanding characteristics of the disease. The disease is chiefly one of children and adolescent, majority of our cases lies between 1 and 20 years of age with male predominance. Occurrence of the condition more in male patient may be due to more prevalence of yersinia infection in male than in female.¹² The average age reported by most authors is below 20 years. The colicky nature of the pain and lack of localized symptoms or findings in cases which may be observed for a few hours may lead to a correct diagnosis. This is especially true where there is a rapid subsidence of symptoms and findings; a course which is often observed in this condition.

CONCLUSION

Main age groups affected with mesenteric lymphadenitis are children and adolescent. The condition is more prevalent in male patients. Mesenteric lymphadenitis should be considered a differential diagnosis in any patient of 20 years or less with symptoms of abdominal pain, fever and vomiting. Association of mesenteric lymphadenitis with viral upper respiratory tract infections, worm infestations, tuberculosis and enteric fever suggest that community acquired infections play major role in developing the condition, and maintaining proper hygiene and prompt treatment of the underlying condition

will decrease the overall occurrence of the condition.

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