

## Role of conservation In case of Acute Segmental Enteritis In children

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Acute segmental enteritis (ASE) is an inflammatory disorder of small bowel that may present as a surgical emergency in children(1-3). ASE is uncommon in most parts of the world, but a relatively high incidence of this disease has been reported from some parts of India . The clinical features are vague and include acute abdominal pain, bilious vomiting, fever, abdominal distension, leukocytosis and radiological evidence of obstruction or peritonitis in a previously healthy child.

Early diagnosis and conservative management carries a good prognosis, without any long term sequelae(1-5). Surgical intervention is not required in most cases and carries a high mortality rate. We report our experience with diagnosis, management and the outcome of 220 children with ASE.

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### I. Subjects and Methods

And ten children with a provisional diagnosis of acute segmental enteritis were managed during the two year period with contrast X-ray showing segmental narrowing of intestine with proximal dilatation. Other one hundred from october, 2016 to september,2018. The diagnostic criteria for ASE included acute generalized abdominal pain with or without bilious vomiting, constitutional features of inflammation (fever, leukocytosis, etc.), radiological evidence of intestinal obstruction acute abdominal conditions were differentiated from ASE on clinical and laboratory investigations like plain abdominal radiograph, contrast X-ray and ultrasonography.

Initially, 28 children underwent surgical treatment with resection and end to end anastomosis of affected segment of small intestine. After observing a high mortality rate (8/28, i.e. 28.5%), we shifted to conservative management. One hundred and ninety two children were managed with intravenous fluids, nasogastric suction and broad spectrum antibiotics. Laparotomy was reserved for cases developing complications or showing signs of deterioration during conservative management.

### II. Result

There were 182 boys and 38 girls with ages varying from 5 to 12 years. About half were from lower socio-economic group and rice Was the staple food in a majority of cases. Past history and family history were non-contributory. Most presented during summer months with a peak incidence (64%) between May and July. Various presenting features included abdominal pain (100%), bilious vomiting (51.5%), abdominal distension and muscle guarding (31.6% and 27.2%, respectively). Absolute constipation, an important feature of mechanical intestinal obstruction was present in only 12.7% cases. Features of acute inflammation like fever and leukocytosis was present in 90% and 92% cases, respectively.

Out of 192 children managed conservatively, 16 required surgical intervention for various reasons like pneumoperitoneum (n = 2), frank peritonitis, (n = 1), deteriorating general condition during conservative management (n = 7) and no signs of improvement for 5 or more days of conservative management (n = 6). Out of these 16 children, 5 died post-operatively, a mortality rate of 31.2%. A total of 176 children were managed conservatively and all but two (1.1 %) made uneventful recovery - (Table I).

### III. Discussion

ASE is an uncommon inflammatory disorder of small intestine. Various synonyms have been used in literature to describe similar conditions like segmental jejunitis, segmental obstructing enteritis and segmental necrotizing enteritis. A similar condition reported from Yugoslavia in 1951, was called Pasini disease because it was first described by Joseper Pasini(7).

Management and Outcome in 220 Cases of ASE.

Management	No.	Mortality (%)
A. Surgery as primary treatment modality	28	8 (28.5)
B. Conservative management		
I. Required surgery for complication	16	5 (31.2)
II. Improved by conservative management	176	2 (1.1)
Total	220	15 (6.8)

The pathology of this uncommon condition described in literature included edema and congestion of small bowel, hemorrhage with patchy areas of necrosis and ulceration. Gangrenous change without perforation are known to occur at times. All these pathological variations were observed in our series. Some children (13/28) had involvement of the jejunum only, whereas others (15/28) had involvement of jejunum and ileum. The accompanying enlarged lymph nodes showed non-specific reactive hyperplasia.

The etiology of ASE is uncertain. But the seasonal incidence, leukocytosis and good response to antibiotics favors an infective etiology(5). Kalani *et al.*(1) concluded that the disease is reversible in early stages with supportive management but once gangrenous changes occur, surgical intervention seems to be mandatory. In our present series primary surgical treatment with resection of all the affected segment, resulted in poor outcome (mortality rate of 28.5%); whereas a conservative approach produced favorable outcome, with a mortality rate of 3.6% (7/192) only. In patients (16/192 *i.e.*, 8.3%) requiring surgical intervention during course of conservative management, the mortality rate of 31.2% (5/16) was not much higher than 28.5% mortality in patients managed by surgery as the primary modality of treatment. It may be noted that surgery was done in the sickest children.

It appears from our observations that though the etiology of acute segmental enteritis is unknown, the disease appears to be basically a disorder that shows favorable outcome with conservative management. Surgery is required only in a small number of patients. Therefore, it may be suggested that once a diagnosis of ASE is made, the initial approach should be conservative. However, the criteria for diagnosis of ASE are still vague, so a cautious approach towards diagnosis is required.

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