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Original Article

MULTIPLE STRICTURES IN SMALL AND LARGE GUT CAUSING INTESTINAL OBSTRUCTION. INTESTINAL TUBERCULOSIS? CROHN'S DISEASE? A CASE OF CLINICAL IMPORTANCE AND INTEREST.

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SUMMARY :

Four of the entities, hernia, intestinal adhesions, intussusception and volvulus~ collectively is responsible for 80% of all gut obstruction. Inflammatory and neoplastic stenosis causing intestinal obstruction are also not rare occurrence. Inflammatory strictures are mostly tuberculous in underprivileged countries and of Crohn's disease in developed countries. Clinical presentations of both types are sometimes so similar that it needs an intelligent approach to differentiate them. Early detection definitely ensures better result in intestinal tuberculosis. Cases with obstruction, needs operative treatment with excellent result in GITB (gastro intestinal tuberculosis).

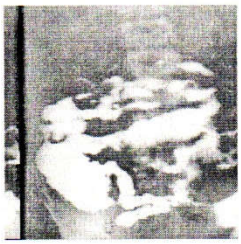
Key words: Multiple intestinal strictures. Obstruction. Intestinal TB.Crohn's disease.

INTRODUCTION:

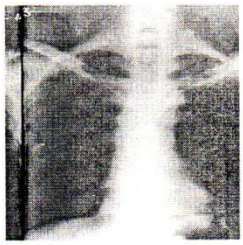
Intestinal obstruction due to strictures is not uncommon in surgical practice. Stricture due to intestinal TB is common in developing countries and that due to Crohn's disease is common in developed countries. Both of them may involve any portion of GI tract from lips to anus and sometimes appears as a diagnostic dilemma. We present such a case who had multiple small and large gut strictures causing intestinal obstruction. By dint of careful clinical approach we succeed to diagnose it as a case of intestinal obstruction due to tuberculosis. Under antitubercolosis therapy coverage we operated the case and achieved good result.

CASE PRESENTATION:

Mr. Arup Kumar Chy. 42, a village homeopath of Adharmanik, Chittagong was admitted in a private hospital in Chittagong in December, 2001 with presentation of acute small gut obstruction. After a certain period of conservative treatment with IV fluid and nutrition, nasogastric suction and mechanical gut cleaning, his condition improved a little. Then a number of investigations were performed to find out the aetiological basis of obstruction. Routine examination of blood revealed relative lymphocytosis, anaemia and high ESR (80mm in fast hour). Routine investigation of urine, blood urea, serum creatinin, serum electrolytes were within normal limit. Stool and gastric juice culture showed no growth of Mycobacterium tuberculosis. Endosecopy of upper GI tract revealed no obnormality. Ba–follow through x-ray of gut showed multiple stenoses in different sites of small gut with mildly dilated intervening loops (pic.no.1)



Picture No.1



Picture no. 2

There was scanty flow of barium into large gut even after 12 hours. Double contrast x-ray of large gut and colonoscopy revealed an ulcero-stenosing lesion in the ascending colon and ulcers in the caecum from where tissue was taken for histopathology. It showed the picture of chronic granulomatous lesion simulating tuberculosis. No malignancy was detected in histopathology report. X-ray chest showed TB consolidation in the right upper lobe (pic. no.2). MT test was negative. No enlarged lymph was detected clinically. USG of abdomen showed a small collection of ascites. He had also a long history of mild evening fever, night sweats, malaise, periodic diarrhoea and abdominal colic. None of his family member suffered from such problem. Depending on this fact we

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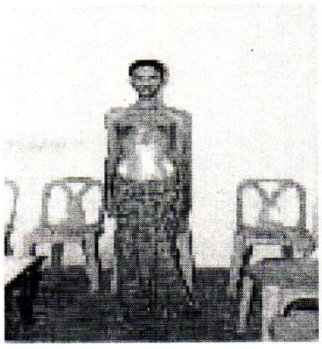
diagnosed the case as intestinal TB associated with right PT and prescribed him an anti tuberculosis regime consisting of four drugs and advised him soft and liquid diet.. With this treatment he enjoyed a short period of improvement but after two months he came again with presentation of intestinal obstruction. This time he was very emaciated and cachetic (Pic.3). We planned laparotomy under anti TB therapy coverage. After a good preoperative preparation and assessment we performed laparotomy. There were multiple strictures of ileum and jejunum and ascending colon (Picture no.4, 5, 6) and a small amount of ascites was present. There was no adhesions between the loops of intestines. Some mesenteric lymph nodes were enlarged. Two of them were taken for histopathology (which subsequently showed chronic granulomatous lesion with cacseation necrosis) Liver, spleen, GB, parietal peritoneum appeared normal. Resection of affected segment with end to end anastomoses was done in three locations. Post-operative period was uneventful. Monthly follow up is done up to 8 months. The patient gained a substantial amount of weight (Pic no.7) and he is symptom free. Ba-follow through of gut shows normal passage of contrast.

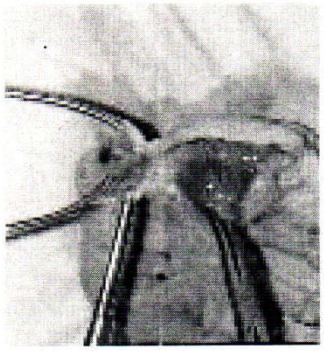
DISCUSSION:

Mycobacterium tuberculosis infects about 1/3 of the world's population and kills about 3 millions of patients each year and is the single most important infectious disease causing death on earth. It can affect GI tract and ileum, proximal colon, peritoneum are most commonly affected. This is common in endemic area, like Bangladesh and 75% has no other lesion of the same. 25% cases have PT. In the early stage the systematic manifestations include chronic ill health, anorexia, fever and night sweats, dyspepsia and weight loss. Later on multiple stenoses develop. Bacterial overgrowth may develop at this stage when diarrhoea and malnutrition occurs. If untreated intestinal obstruction develops due to fibrosis of the lesions. At this stage the disease may simulate Crohn's disease. Management and results of these two entities are different. The difference between GITB lesion and Crohn's disease may be summarized as follows:

GITB	Crohn's disease
More common in developing countries	Common in developed countries
Any part of GI tract is affected. Ileum and Caecum are affected most.	Any part can be affected. Terminal ileum is affected most.
PT is found in about 25% cases.	Usually no PT is found.
MT test may be positive.	MT test is negative.
Caeseation may be seen	No caeseation is present.
Mycobacterium tuberculosis is the cause.	Aetiology is unknown.
Growth of mycobacterium tuberculosis	No causative organism has ever been found.
String sign of Kantor is absent	String sign of Kantor is present.
Anti TB gives good result.	It is a progressive disease No role of anti TB treatment.
Can be prevented by BCG vaccination.	No role of vaccination.

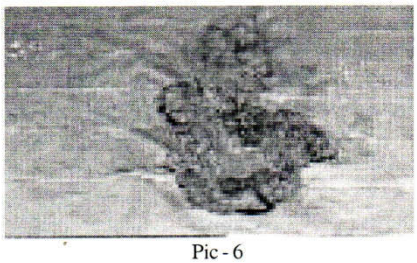


Pic - 3

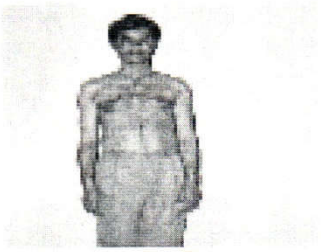


Pic - 5

Pic - 4



Pic - 6



Pic - 7

Early cases can be cured by antitubercolosis therapy. When intestinal obstruction develops surgery is indicated. Resection of affected portion with end-to-end anastomosis and sometimes sphincteroplasty are the time-honoured procedures. Big loss of gut due to resection may cause short gut syndrome. Continuation of antituberculosis therapy in the post-operative period is essential.

CONCLUSION:

Intestinal tuberculosis is not uncommon disease in the developing country like Bangladesh. Early diagnosis is important. If not treated in the early stage intestinal obstruction may occur where surgical intervention is necessary. Sometimes it simulates Crohn's disease. Proper approach is necessary to differentiate them. Nationwide anti TB program should be intensified to accelerate the awareness regarding the disease in Bangladesh.

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