A CLINICAL STUDY OF SUB ACUTE INTESTINAL OBSTRUCTION IN ADULTS
Archana Shukla¹, Sudhir Singh Pal²

HOW TO CITE THIS ARTICLE:

ABSTRACT: A study was conducted on 71 patients admitted in Dept of surgery, Hamidia hospital Bhopal. These patients came with complaints of recurrent episodes of vomiting, distension of abdomen, passing flatus and motion but frequency decreased. On examination salient features were increased bowel sounds in most, and palpable abdominal lump in few. This sign and symptom complex is commonly called as sub-acute intestinal obstruction. 52 patients got relieved by conservative management where as 19 required operative intervention. Investigations were done which were mainly radiological, X rays of abdomen, ultrasonography of abdomen. CECT was done in selected cases where ultrasonography was not conclusive. It was found that patients of SAIO with history of previous abdominal surgery responded to conservative management. Others had more inclination of having operable lesions and required more investigations and operative intervention.

KEYWORDS: sub acute intestinal obstruction, recurrence, previous surgery, conservative treatment

INTRODUCTION: Apart from obvious cases of intestinal obstruction an almost equal number of patients were found to have sign and symptoms of partial obstructions but recurrently¹, ⁹, ¹⁷. They have more than one episode of obstruction hence suffering and hospitalization was for longer period of time. It was puzzling for surgeons to be decisive as few got definite relief by conservative management but had another episode sooner or later. Radiological, hematological, serological and histopathological investigations were done to reach to a conclusion for management of the patient successfully.

METHOD: A clinical study was conducted at Dept. of surgery unit iii over a period of one year from March 2012 to March 2013 on patients who met with the criteria of having recurrent pain in abdomen along with distention, decreased frequency of passage of flatus and motion, x-rays showing multiple air fluid level and conservative management was planned to begin with.

Initially most of these patients were relieved by conservative management that is, by keeping them abstained from oral diet, naso-gastric suction and parenteral supplementations. Significant relief was within the period of 6 hr to 48 hr. The patient who had acute symptoms of obstruction with no relief in 6 hrs were put in the category of acute intestinal obstruction and were not included in the study.⁹, ¹⁰, ¹⁷

Details of patients were documented as per profile features of age, sex, no. of admissions for similar episodes, and detailed history.

All routine investigations were done. Patients having history of tuberculosis, past history of tuberculosis or having family history of this disease were further subjected to mantoux test, Sputum for AFB and TBPCR. Series of X rays of abdomen, ultrasonography was done in all patients and CECT in selected patients. ⁸, ¹²

This was done to know the predictors for conservative management, cause of obstruction and pathology underlying.
Those not getting relieved even after trial of conservative management were taken for exploratory laparotomy and procedure as per lesion was performed.\textsuperscript{17, 19, 20} All patients were followed up from 6 month to 12 months time

RESULT: In one year 71 patients were admitted with the complaints of nausea, vomiting, pain and distension of abdomen, decreased frequency of passage of flatus and motion, increased bowel sounds and palpable abdominal lump.

The youngest was 15 year old and the oldest was 80 years of age the mean age being 46.5 yrs. were 38 males 33 females. Number of episodes ranged from 2 to 6 times and duration of stay from 7 days to 60 days.

History of previous surgery was the commonest followed by history related to tuberculosis. Passage of flatus and motion less frequently associated with generalized pain all over abdomen was the commonest symptom. Increased bowel sound was found in most of the patient and hence is considered as most important sign to diagnose clinically SAIO.

Routine hematological tests done in all mostly showed anemia.\textsuperscript{8} Mantoux test and sputum for AFB were done in those having positive history or other investigation suggesting tuberculosis was not conclusive. TBPCR was done in all above mentioned patients was conclusive.\textsuperscript{12} Plain X ray abdomen was done and all patients revealed multiple air fluid levels. Ultrasonography was done and was conclusive in 15 out of 19 operative patients. It revealed increased peristalsis in most of the cases and ileo -caecal thickness in few. CECT was done in 5 patients and was conclusive in all.\textsuperscript{7, 11}

19 Patients were at one point of time required exploration and abdominal laparotomy was done, Rest of 52 patients were treated conservatively.

The most common site was small intestine followed by appendix, caecum and sigmoid. Ileal strictures, fibrinous tubercular peritonitis, adhesions due to previous surgery, chronic appendicitis, Carcinoma of ilio-caecal junction, Mal-rotation of small gut and volvulus were the causes respectively.

Out of 71 patients 32 had history of previous surgery.\textsuperscript{2, 3, 4} In previous surgeries abdominal tubectomies were the biggest culprit followed by abdominal hysterectomy, exploratory laparotomy for perforation peritonitis and appendicectomy. Few patients documents were not available to state exact cause of surgical procedure. Adhesiolysis was done in 2 patients who were not responding to conservative manner and 30 were treated conservatively.\textsuperscript{2, 3, 4}

25 patients were having abdominal tuberculosis. Most of them where diagnosed for the disease during the stay in hospital and couple of them were already diagnosed but taking irregular treatment of ATT.\textsuperscript{13, 18} Adhesiolysis was done in 2 patients who were found to have fibrinous adhesion due to peritonitis.\textsuperscript{10, 13} Single passable strictures were found in 4 patients, for which stricturoplasty was done. Passable strictures closely placed were found in 5 patients on which resection and anastomosis was done.\textsuperscript{20} Mesentric lymph node and omental biopsy was obtained for confirmation by histopathological examination.\textsuperscript{12, 16} Total 14 patients were treated conservatively had TBPCR positive for mycobacterium tuberculosis and ATT was continued on this basis.\textsuperscript{18}

Ten patients were diagnosed as chronic appendicitis with appendicular lump taking inappropriate inadequate treatment. Two of them were operated and adhesiolysis and appendicectomy was done. 8 were treated conservatively.\textsuperscript{17}

Two patients of adenocarcinoma of ileocaecal junction under went right hemicolectm.\textsuperscript{11, 17}
There was one patient of volvulus of sigmoid colon who was having recurrent episodes. He was treated by performing colocolic resection of redundant part of colon followed by anastomosis. Malrotation of the small intestine was found in one patient in which Ladd procedure of derotation was done.

**DISCUSSION:** The study included 71 patients of SAIO. In sub acute or partial obstruction patient get relieved at intervals giving false impression to patients and their relatives regarding cure of disease. The surgeons on the other hands are puzzled. Due to recurrent episodes suffering was more, and hospitalization was for longer period of time.

The patient undergone abdominal-pelvic surgery had more tendency of developing post operative adhesions followed by exploratory laparotomy for perforation peritonitis. Patients who develop post operative adhesion presented as SAIO. They outnumbered other causes but thankfully settled well with conservative management.

Patients having abdominal tuberculosis develop partial obstruction due to strictures or fibrinous peritonitis. The patients already on ATT were irregular in taking treatment. Abdominal tuberculosis was next culprit and maximum surgery was done for this disease. This can occurs at any age. Majority of patients belonged to poor socio- economical class having poor nutrition.

Non compliance to anti tubercular therapy is also contributory to present the disease as SAIO. Patients having lump in right iliac fossa on investigations were mostly diagnosed as chronic appendicitis and appendicular lump. After specific conservative management they were advised for interval appendicectomy but only couple of patient came for definitive surgery.

Other less common causes were adenocarcinoma of ileo caecal area for which hemicolectomy was performed, followed by volvulus and mal rotation of small gut for which colo colic resection anastomosis and lads procedure was done respectively.

Patients who developed SAIO and had history of previous surgery can be treated conservatively where as others should be subjected to radiological and biochemical investigation. In our study, CECT and TBPCR were found to be most diagnostic.

In view of health problems of developing countries tuberculosis should be considered as important cause for SIAO. With regular compliance of ATT and using special investigation SAIO due to tuberculosis can be treated successfully.

**REFERENCES:**


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**Fig. 1**

![Etiology Chart](#)
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