

7

Original article:

**ABDOMINAL TUBERCULOSIS WITH DIFFERENT MANAGEMENT
MODALITIES IN SMT SHARDABEN GENERAL HOSPITAL SARASPUR
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ABSTRACT

Background: Tuberculosis is a major health hazard in India. Because of its diverse manifestation ,difficult diagnosis, widespread complication ,prolonged morbidity and increased mortality the study of this disease becomes even more important .The objectives of the study were to study age and sex distribution of abdominal tuberculosis ,to study the association of abdominal tuberculosis with pulmonary tuberculosis ,various clinical presentation of abdominal tuberculosis ,to study surgical management of abdominal tuberculosis.

Methods: The study was carried out in 30 patients of abdominal tuberculosis of different age group and sex admitted in department of surgery , Smt SCL hospital , Saraspur , Ahmedabad during period of April 2018 to march 2019.This is the prospective study in which patients are present with acute abdomen like intestinal obstruction ,peritonitis ,RIF lump taken ,further investigated and laparotomies were performed and AKT started after proven by biopsy reports.

RESULTS: In my study most common age group affected is between 2nd to 4th decade and gender wise male are more affected then female., Most common symptom of presentation is abdominal pain mostly at RIF and periumbilical region associated with anorexia and vomiting and abdominal distension .Out of 30 patients 19 patients had pulmonary tuberculosis and patient had completed course of AKT.

CONCLUSION: In all 30 patients present as acute abdomen. Patients present with peritonitis were explored in emergency and other patients initially conservatively managed after all radiological investigations on patients were explored ,Biopsy reports were collected and after confirmation of tuberculosis AKT (ISONIAZID,RIFAMPICIN,PYRAZINEMIDE,ETHAMBUTOL and STRPTOMYCIN,LEVOFLOXACIN.) started .Good clinic pathological workup in patients of abdominal tuberculosis results in earlier diagnosis and timely management of this curable disease.

Key words : tuberculosis , Anti Koch's treatment, surgery .

INTRODUCTION:

Abdominal tuberculosis continues to represent a diagnostic challenge to clinicians .The abdomen is involved in 10-30% of the patient with pulmonary tuberculosis¹ .Tuberculosis is caused by mycobacterium tuberculosis .Tuberculosis is a major health hazard in India .It is because of wide prevailing co existing malnutrition, poverty, overcrowding and lack of medical facilities in certain areas .Abdominal tuberculosis may involve the gastrointestinal tract , peritoneal and mesenteric lymph nodes .Commonest site of involvement are the terminal ileum and ileo-caecal region followed by jejunum and colon .The intestinal lesions are either ulcerative or hypertrophic. Tuberculosis is commonest cause of stenotic intestinal lesion in tropical countries like India. Histo-pathological examination reveals epithelioid cell granulomas with langhan's giant cells and central caseation necrosis. Acid fast bacilli are difficult to demonstrate on culture from intestinal lesion .The disease is common in young adults .It may have a chronic, sub acute or acute presentation.

Types of abdominal tuberculosis:

INTESTINAL : Ulcerative , hyperplastic , mixed

PERITONEAL : Acute , Chronic (ascitic , encysted , plastic abdomen, purulent)

Modes of involvement in abdominal tuberculosis :By

ingestion ,Infected food or milk- primary intestinal tuberculosis,Infected sputum- secondary intestinal tuberculosis, Haematogenous spread from distant tubercular focus,Contagious spread from infected adjacent foci ,Through lymphatic channel ,Ulcerative lesions of small intestine present with chronic abdominal pain and diarrhoea , malabsorption is common .Small intestinal strictures and hypertrophic ileocecal lesions cause subacute intestinal obstruction .peritoneal tuberculosis presents with ascites or sub acute intestinal obstruction due to adhesions .Nodal tuberculosis is associated with intestinal or peritoneal lesions. The mortality rate is very high it can be reduced by timely diagnosis and timely treatment.

METHODS:

The study was carried out in 30 patients of abdominal tuberculosis of different age group and sex admitted in department of surgery , Smt SCL hospital , Saraspur , Ahmedabad during period of April 2018 to march 2019.This is the prospective study in which patients are present with acute abdomen like intestinal obstruction ,peritonitis ,RIF lump taken ,further

investigated and laparotomies were performed and AKT started after proven by biopsy reports.

RESULTS:

TABLE NO.1 - AGE OF PRESENTATION

AGE GROUP	NO.OF PATIENTS(n =30)	PERCENTAGE
11-20	2	7
21-30	10	33
31-40	8	27
41-50	5	17
51-60	3	10
61-70	2	7

TABLE NO. 4 SURGICAL PROCEDURE PERFORMED

SURGICAL PROCEDURE	NO. OF PATIENTS
STRICTUROPLATY	12
STRICTUROPLASTY +CLOSURE OF PERFORATION PROXIMAL TO STRICTURE	6
RIGHT HEMICOLECTOMY +ILEO-ASCENDING ANASTOMOSIS	3
ADHESIOLYSIS +MESENTERIC LYMPHNODE AND OMENTAL BIOPSY+PERITONEAL LAVAGE	9

In my study most common age group affected is between 2nd to 4th decade and gender wise male are more affected then female. Most common symptom of presentation is abdominal pain mostly at RIF and periumbilical region associated with anorexia and vomiting and abdominal distention. Out of 30 patients 19 patients had pulmonary tuberculosis and patient had completed course of AKT.

DISCUSSION:

33% of patients were in the third decade,27%in fourth decade and 17% in fifth decade. IN this study among the general symptoms Abdominal pain, abdominal distention, anorexia, vomiting were most common symptoms. Abdominal pain was most commonly localised to RIF and periumbilical region.This is so probably because the ileocecal region is the commonest

site of intestinal tuberculosis. Out of 30 patients 77% patients are male. 6 patients presents with peritonitis were explored in emergency found stricture at ileum and perforation proximal to it, perforation was repaired and stricturoplasty was done and biopsy taken from wall of stricture and perforation. 21 patients present with intestinal obstruction were initially managed conservatively later on laparotomy done .Out of 21 patients 12 patients had ileal stricture in which stricturoplasty done and in 9 patient adhesiolysis and peritoneal lavage was given out of 9 , 1 patient on exploration found tubercles on bowel loops and bowels are covered with omentum (plaster abdomen) in which omentum and lymph node were send for biopsy. 2 patients were present with RIF lump.after radiological investigation patient explored and right hemicolectomy was done and ileo ascending anastomosis was done.1 patient were present with anorexia and weight loss after all radiological investigation diagnostic laparoscopy was done in which jejunum ,ileum had tubercles with multiple passable strictures after that laparotomy was done ileo ascending anastomosis was done. AKT started after tuberculosis is proven by biopsy reports.(isoniazid 5mg/kg, rifampicin 10mg/kg, ethambutol 15mg/kg , pyrazinamide 25mg/kg , streptomycin 15mg/kg and in second line drug levofloxacin is given for a period of 6 -9 months In patients with severe adhesion tablet prednisolone 10mg started 4 times a day and gradually taper after every week.

CONCLUSION:

In all 30 patients present as acute abdomen. Patients present with peritonitis were explored in emergency and other patients initially conservatively managed after all radiological investigations on patients were explored. Biopsy reports were collected and after confirmation of tuberculosis AKT (ISONIAZID, RIFAMPICIN, PYRAZINEMIDE, ETHAMBUTOL and STRPTOMYCIN, LEVOFLOXACIN.) started. Good clinicopathologic workup in patients of abdominal tuberculosis results in earlier diagnosis and timely management of this curable disease.

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