

Different Presentations of Abdominal Tuberculosis at Mayo/Sir Ganga Ram Hospital, Lahore

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Prospective study carried out on 34 patients in the Department of Surgery at Mayo and Sir Ganga Ram Hospitals, Lahore. Aim was to look into the various presentations of abdominal tuberculosis and treatment offered to the patients. Abdominal tuberculosis affects young males and females in equal proportions. Most of the patients presented with advanced disease. 32% patients presented with peritonitis and 32% patients presented with strictures. Less common presentation were mass right iliac fossa, ascites and faecal fistula. Most of the patients had operative treatment in the form of resections (29%), repair of perforation (22%), biopsy (16%), ileostomies (9.6%), stricturoplasty (9%), drainage of abscesses (3.22%) and right hemicolectomy (9%). Only 8% of patients were managed conservatively. Our mortality was 2.9%. So tuberculosis of abdomen needs to be recognized earlier and prompt surgical intervention should be carried out, to avoid the disastrous complications.

Key words: Abdominal tuberculosis, tuberculous peritonitis

Tuberculosis has become an extremely common disease in our society. Apart from frequent involvement of lung and lymph nodes, abdominal tuberculosis is being increasingly recognized as underlying cause of abdominal complaints, presenting to outpatient as well as emergency department of our hospitals.

* Tuberculosis is a disease of poverty, overcrowding and malnourishment.

* Pakistan ranks 5th, behind India, China, Indonesia and Bangladesh.

* A total of 7.96 million new cases of tuberculosis in 1997 were estimated including 3.52 million (44%) cases of infectious pulmonary disease (smear positive). In that year 1.87 million people died of T.B. The average case fatality rate was 23% but it exceeded 50% in some, African countries with high HIV rates^{1,2,3,4}.

* Southeast-Asian countries, accounted for the largest number of cases (2.95 million) followed by Western Pacific region (1.96 million). The European and American regions had the lowest cases both total and per capita. Africa had by far the highest fraction of persons with MTB/HIV co-infection case. Detection rates were highest in Americans and Europeans^{5,6,7}.

Purpose of study

This is a report of our recent experience with different surgical presentations of abdominal tuberculosis. We intend to familiarize the clinicians with different presentations of this extremely common malady in the hope that it will be diagnosed early and treated before the disastrous consequence of delay in treatment.

Patients and Methods

Two surgical units from the Department of Surgery of Mayo and Sir Ganga Ram Hospitals, Lahore. Data was collected prospectively from all patients with abdominal tuberculosis over 11 months period from March 1999 to January 2000.

All those patients in whom the ultimate diagnosis of abdominal tuberculosis was confirmed under senior authors supervision were included in the study. Other patients in whom diagnosis was suspected but not confirmed are excluded from this report.

All the patients through Emergency and outpatient department were admitted in the ward and a set format of performas were filled. These performas included

- detailed history
- Detailed physical examination
- Laboratory investigations like:

- *ESR
- *TLC
- *DLC
- *Montoux
- *Mycodot
- *PCR

- Imaging techniques such as

- *X-ray chest PA
- *X-ray plain abdomen
- *Barium meal follow through
- *Barium enema

Diagnosis was confirmed by different methods which included lymph node biopsy, pus for AFB culture, peritoneal fluid for AFB culture - sensitivity, resected gut for histopathology, omental tissue for H/P.

Lastly strict follow up was maintained and written on performas properly stamped letters were given to the patients on their discharge, to have an appropriate reply regarding their outcome.

Results

Total number of patients: 34

Age: Median age: 22.44 years (Range: 11-75 yrs)

Sex: Male: 17, Female: 17

Modes of Presentation

Peritonitis	11(32.35%)
Stricture	11(32.35%)

Colic/obstruction
 Right iliac fossa mass 3(8.82%)
 Ascites 2(5.88%)
 Pain RIF 6(17.64%)
 Postoperative 1(2.94)
 Faecal fistula after appendectomy

Management

*Conservative 3(8.82%)
 *Operative 31(91.17%)
 -Resection 9(29.03%)
 -Repair of perforation 7(22.58%)
 -Biopsy only 5(16.12%)
 -Ileostomy 3(9.67%)
 -Strictureplasty 3(9.67%)
 -Drainage of abscess 1(3.22)
 -Right hemicolectomy 3(9.67%)

Conservative Management

It included antituberculous therapy.

First line drugs

*Bactericidal (INH, Rifampicin, Pyrazinamide, Streptomycin)

*Bacteriostatic (Ethambutol, PAS, Thioacetazone)

2nd line drugs

*Ciprofloxacin
 *Vibramycin
 *Cycloserine
 *Ethionamide/Prothionamide

Outcome

* 31 patients improved and recovered
 * 3 deaths, all had their initial operations elsewhere with multiple leaks from bowel.

Discussion

We have concluded from our study that abdominal tuberculosis affects people of both sexes in equal ratio with a median age of 22.4 years. In contrast, studies by Bhonsali et al have shown that it affects females 2-3 times more with a peak incidence in third to fourth decade. Majority of our patients have presented with peritonitis, strictures, mass right iliac fossa, ascites, pain right iliac fossa and faecal fistula. The management has been mostly operative in the form of resections, stricturoplasties, repair of perforations, ileostomies, drainage of abscesses, biopsy and right hemicolectomy (Table 1&2). At most of the time the diagnosis was made from the histopathology of the excised tissue and lymph node. The studies by Gondal et al have shown that most of the available clinical, biochemical and microbial tests lack sensitivity and specificity. The only reliable technique is diagnostic laparoscopy or laparotomy. We could not avail the facilities of laparoscopy, because of its non availability. In other studies carried out by Baluch and Mahmood and Asghar all patients had to undergo laparotomy to establish the diagnosis.

Table 1. Modes of presentations

Modes of presentations	No. of Pts.	%age
Peritonitis	1	32.4
Stricture	11	32.35
Right iliac fossa mass	3	8.82
Ascites	2	5.88
Pain RIF	6	17.64
Post operative (faecal fistula)	1	2.94

Table 2. Management

	No. of Pts.	%age
Conservative	3	8.82
Operative	31	91.17
Resections	9	29.03
Repair of perforations	7	22.58
Ileostomy	3	9.67
Strictureplasty	3	9.67
Drainage of abscess	1	3.22
Right hemicolectomy	3	9.67

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