

DEMOGRAPHIC PROFILE AND CLINICAL PRESENTATION OF PATIENTS OF ABDOMINAL TUBERCULOSIS IN SURGERY WARD OF TERTIARY LEVEL HOSPITAL IN MB HOSPITAL, UDAIPUR, RAJASTHAN

General Surgery

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ABSTRACT

BACKGROUND- Tuberculosis, especially in developing countries is a major health problem, and causes significant morbidity. WHO declared it a global emergency and is the most important communicable disease worldwide. TB of the gastrointestinal tract is the sixth most frequent form of extra-pulmonary site, after lymphatic, genitourinary, bone and joint, miliary and meningeal tuberculosis.

MATERIAL AND METHODS- The study was conducted in 50 patients admitted in the Department of General Surgery in Maharana Bhupal Government Hospital, Udaipur. It included all patients diagnosed as abdominal tuberculosis. After admission of patient suspected to have abdominal tuberculosis in ward, detailed history, examination and specific investigation for diagnosis of abdominal tuberculosis was done.

RESULTS- TB majorly affects the individuals between 20-40 years of age (46%) and is more common in males, low socio economic status and rural area. Sub acute intestinal obstruction was the most common type of clinical presentation present in 82% of cases. 10% cases presented with acute intestinal obstruction and 8% cases presented with perforation peritonitis. The commonest presenting complaint was constipation in 90% cases. Pain was found in 88% of cases. Vomiting was found in 48% cases. Constitutional symptoms like fever, sweats and weakness were found in 32% of cases.

KEYWORDS

TB, diagnosis, surgical management

INTRODUCTION

Tuberculosis, especially in developing countries is a major health problem, and causes significant morbidity. World Health Organization (WHO) declared it a global emergency and is the most important communicable disease worldwide. TB of the gastrointestinal tract is the sixth most frequent form of extra-pulmonary site, after lymphatic, genitourinary, bone and joint, miliary and meningeal tuberculosis. The postulated mechanisms by which the tubercule bacilli reach the gastrointestinal tract are:

- hematogenous spread from the primary lung focus in childhood, with later reactivation;
- ingestion of bacilli in sputum from active pulmonary focus;
- direct spread from adjacent organs; and
- and through lymph channels from infected nodes.

Types

- 1. INTESTINAL TUBERCULOSIS** -Ulcerative, Hyperplastic, Sclerotic / fibrous, Diffuse colitis
- 2. PERITONEAL** -Acute tubercular peritonitis, Chronic tubercular peritonitis, Ascitic, Encysted / Loculated, Fibrous (adhesive, Plastic)
- 3. TB OF MESENTARY AND ITS CONTENTS** -Mesenteric adenitis, Mesenteric cysts, Mesenteric abscesses, Bowel adhesions, Rolled up omentum
- 4. TB OF SOLID VISCERA** -Liver, Gallbladder, Biliary tract, Pancreas, Spleen
- 5. Retroperitoneal lymph node TB**

MATERIAL AND METHODS

The study was conducted in 50 patients admitted in the Department of General Surgery in Rabindra Nath Tagore Medical College & Maharana Bhupal Government Hospital, Udaipur. It included all patients diagnosed as abdominal tuberculosis. Patients from both sexes of various age groups had been diagnosed as abdominal tuberculosis on the basis of clinical presentation, radiologic or operative findings or histopathological findings were included in the study.

After admission of patient suspected to have abdominal tuberculosis in ward, detailed history, examination and specific investigation for diagnosis of abdominal tuberculosis was done. Confirmation was done by histopathological examination as far as possible.

OBSERVATIONS

Table 1: Age and sex distribution (n=50)

Sex	Age Groups			No.(%)
	<20 years	20-40 years	>40 years	
Male	6	16	16	38(76%)
Female	3	7	2	12(24%)
Total	9	23	18	50(100%)
Religion		No. of cases	Percentage (%)	
Hindu		47	94	
Muslim		3	6	
Region		No. of cases	Percentage (%)	
Urban		14	28	
Rural		36	72	
Socioeconomic Status		No. of cases	Percentage (%)	
Lower		28	56	
Middle and Upper		22	44	
Sex		SMOKER	NON SMOKER	
Male		16(32%)	22 (44%)	
Female		0	12 (24%)	

FIGURE 1: Distribution of patients according to duration of complains (n=50)

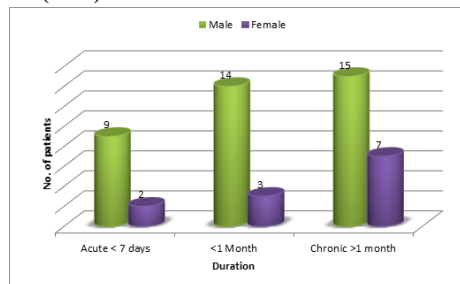
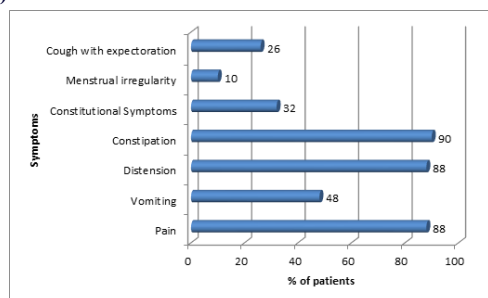


Table 2: Distribution of patients according to presentations (n=50)

Presentation	Total	Percentage (%)
SAIO	41	82
AIO	5	10
Peritonitis	4	8
Total	50	100

FIGURE 2: Presenting symptom of patient in the present study (n=50)**RESULT-**

In present study 38 (76%) cases were males and 12 (24%) cases were females. Male to female ratio was 3.16:1. Most of the cases affected by the disease were in the age group of 20-40 years, those were 23 (46%) of the total cases. 47 patients were belong to Hindu religion and 3 patients were of Muslim religion. Ratio of Hindus to Muslims affected by the disease was 15.66:1 in present study. In present study 36 (72%) of cases were from rural areas and 14 (28%) patients were from urban area. The ratio of rural to urban in present study was 2.57:1. In present study 56% of cases belonged to low socioeconomic group indicating high prevalence of disease in this group. It was found in the present study that 42.1% of males affected by the disease had a history of smoking (n=16, 42.1%), while no female patient had history of smoking.

Patient were categorized into three subcategories, depending upon the duration of symptoms prior to presentation, i.e. acute presentation (<7 days), acute on chronic presentation (7 to 30 days), and chronic presentation (>30 days). In present study patients had chronic presentations (n=22, 44%), outnumbered the patients with acute 11 (22%) and acute on chronic 17 (34%) patients in our series.

On the basis of clinical presentation all cases were classified in three groups including SAIO, AIO, and Peritonitis. Sub-acute intestinal obstruction was the most common type of clinical presentation present in 82% of cases, followed by acute intestinal obstruction in 10% cases and peritonitis in 10% cases.

In present study constipation was the most common symptom, present in 90% of cases. Next symptom in frequency was the pain and distension present both in 88% of cases. Vomiting was found in 48% cases. Constitutional symptoms like fever, weakness was found in 32% patients. 26% patients had respiratory symptoms in form of cough and expectoration. 41.6% (5 cases n=12) of females had menstrual irregularities.

**DISCUSSION-
CLINICAL PRESENTATION**

In the present study 92% cases presented with obstructive symptoms, out of which 82% cases had sub acute obstruction and 10 % had acute presentation. Bhansali (1977) however reported in his study 40.28% cases of acute and 48% cases of sub-acute type of obstruction in his study. On the contrary Dandapat et al. (1985) reported 70% cases as acute de novo and 30% as acute on chronic. Obstructive symptom in abdominal tuberculosis can result due to various mechanisms including stricture, adhesions etc.

Peritonitis occurred in cases due to perforation of hollow viscera or caseation of mesenteric lymphnodes. In this study 8% cases presented with perforation peritonitis. On the contrary Bhansali (1977), Kapoor (1991) and Dandapat (1985) reported perforation peritonitis in 4.5% of their cases. Bhansali (1977) reported a few cases of peritonitis due to ruptured caseous lymph nodes.

Localized peritonitis was usually due to inflamed and caseous lymph nodes. On few occasions it mimicked acute appendicitis as also reported earlier by Bhansali (1977) and Kapoor et al. (1991).

SYMPTOMS

The different modes of presentation as mentioned earlier with their relative frequencies of incidence closely resemble the presentations reported in other series. Though all patients presented with symptoms & signs of acute abdomen, all of them also complained of low grade

fever, weight loss, anorexia, disturbed bowel habits, abdominal distension, menstrual abnormalities over a variable period of several weeks to months. Symptoms and signs have been reported similarly by other authors with variable percentages of prevalence. Low literacy rates, lack of awareness about the disease, personal bias due to low level of acceptance at the time of diagnosis, lack of accessibility to appropriate health care facilities and the vague symptoms of this disease, all account for the delayed presentations. The patients are often diagnosed once complications occur, like intestinal obstruction or intestinal perforation and peritonitis. In our study population, poor resources, difficulty in initial diagnosis, and low affectivity of patient transfer mechanism from the peripheral areas, further added to delayed presentation to the hospital.

Pain is the commonest and almost universal complaint. Abdominal pain was present in 88% of cases in present study. which is comparable to studies of SK Bhansali (1977) and A Mohammed (2013) reporting pain abdomen as primary symptom in 94% cases and 98% respectively. Pain is due to an inflammatory process, mass or obstruction. Das and Shukla (1976) describe obstructive pain as colicky in nature whereas Prakash (1978) described it as dull aching punctuated by colic. In majority of cases in the present series pain was localized in umbilical region or generalized. Das and Shukla (1976) reported the same findings.

In the present study in decreasing order of frequency the symptoms are constipation (90%), pain (88%), distension (88%), vomiting (48%) and constitutional (32%) symptom like fever, weight loss. Constipation is usually progressive due to gradually increasing obstruction of the bowel lumen. Menstrual irregularities were reported in 10% of the female patients. Das and Shukla (1976) reported menstrual irregularities in 35.6% of female cases. Others have reported an incidence of 3-24% (Bhansali, 1977).

CONCLUSION-

Abdominal tuberculosis was mostly found in younger age group and most of the cases presented as sub acute intestinal obstruction. Commonest symptoms were constipation, pain, fever, sweats and weakness. Abdominal tuberculosis remains a diagnostic challenge, having diverse and nonspecific symptomatology. A high index of clinical suspicion is needed. Proper identification of symptoms and signs at primary care level and timely referral can save many lives.

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