A CLINICAL PRESENTATION AND SURGICAL MANAGEMENT OF ABDOMINAL TUBERCULOSIS AT IMCHRC, INDORE

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Abstract

Tuberculosis is an important cause of morbidity in India. Abdominal Tuberculosis is difficult to diagnose. This prospective observational study is based on those patients who were diagnosed to be suffering from Abdominal Tuberculosis only after they presented with an acute abdomen. This study aims to document the nature of different types of acute presentation in Abdominal Tuberculosis according to concerned clinical presentation & surgical management. The study also discusses the indications and extent of surgical intervention.

Keywords: Surgical, Abdominal & Tuberculosis.

INTRODUCTION:

Tuberculosis is a life intimidating disease which can virtually affect any organ system(1). Abdominal TB comprises around 5 percent of all cases of TB (5). The prevalence of TB has increased in both immuno competent and immuno compromised and it can affect virtually any organ. The primary site of TB is usually lung, from which it can get disseminated into other parts of the body. The other routes of spread can be contiguous involvement from adjacent tuberculous lymphadenopathy or primary involvement of extrapulmonary organ. The diagnosis of extrapulmonary TB can be difficult as it presents with nonspecific clinical and radiological features and requires high degree of suspicion for diagnosis. The abdominal TB, which is not so commonly seen as pulmonary TB, can be a source of significant morbidity and mortality and is usually diagnosed late due to its nonspecific clinical presentation(2). Approximately 15%-25% of cases with abdominal TB have concomitant pulmonary TB(3,4). Hence, it is quite important in identifying these lesions with high index of suspicion especially in endemic areas. ABDOMINAL TB is a type of TB that affects the Gut, Peritoneum, Abdominal lymph nodes and more rarely the solid organs in the abdomen (liver, pancreas, spleen). Abdominal TB leads to severe

illness in adults and children and can cause complications such as bowel rupture can lead to death. Risk factors for development of abdominal TB include cirrhosis, HIV infection, diabetes mellitus, underlying malignancy, treatment with anti-tumor necrosis factor (TNF) agents, and use of peritoneal dialysis (6-10).

Material & Method

It is a prospective observational study including 50 patients were part of this study conducted from Oct 2017 – Mar 2019 with a diagnosis of abdominal tuberculosis confirmed histopathologically carried out in Mahatma Gandhi Medical college associated M.Y. Hospital, Indore, Madhya Pradesh, India.

A careful history taking and thorough clinical examination was carried out in each case. All the patients were rapidly resuscitated in the surgical ward with intravenous fluids, continuous nasogastric aspiration and foley catheterisation. Intravenous antibiotics & proton pump inhibitors were started. Blood samples collected from all patients were sent for routine haematology, blood biochemistry & serology to rule out HIV infection. Straight X-ray of abdomen in erect posture was done in all the patients.

Results

Table 1: Clinical Presentation

S. No.	Clinical Presentation	No of Cases	Percentage of Cases
1.	Intestinal obstruction	23	46%
2.	Perforative peritonitis	14	28%
3.	Acute appendicitis	06	12%
4.	Abdominal pain with lump	04	08%
5.	Abdominal pain with ascites	03	06%
	Total	50	100%

Table 2: Clinical Presentation

S. No.	Operative findings on exploratory laparotomy	No of Operated Cases	Percentage of Cases
1.	Single/ multiple strictures in small gut	13	26%
2.	Hypertrophic variety in ileocaecal region	12	24%
3.	Small gut perforation with single or multiple strictures distally	9	18%
4.	Small gut perforation in hypertrophic variety	6	12%
5.	Small gut perforation with tubercles	4	8%
6.	Acute appendicitis with abdominal rculosis	4	8%
7.	Abdominal cocoon	2	4%
	Total	50	100%

Discussion

Blood investigations revealed haemoglobin values less than 10gm% in 75% patients. ESR was raised in 80% of cases and leucocytosis was present in 100% of patients. Results of haematology corroborates the findings of other authors(11). Sputum for AFB was negative in 100% of cases. Chest x-ray in 100% of cases showed no lesion suggestive of pulmonary tuberculosis. None had an active chest lesion. None of the patients had a past history of tuberculosis. Associated pulmonary disease in Abdominal Tuberculosis has been variously observed in literature(12). The radiological investigation like USG & CT scan all showed features suggestive of Abdominal Tuberculosis. The reviewed literature mentions similar radiological findings in different case series (13).

Charokar K, who reported 68% of his study group patients to be in underweight category and 32% in the normal weight category (14). Thirty five of our patients presented to our surgery emergency with features suggestive of peritonitis and Twelve patients with acute intestinal obstruction and sub acute intestinal obstruction. The most frequent complaint in history was pain (85%) followed by vomiting (74.4%), weight loss (74%), fever (36%) and altered bowel habits (21%). Sharma MP have reported similar findings in their research (15). Study found that primary perforation was the commonest intra-operative finding be it Ileal or jejunal perforation

followed in decreasing order of frequency by multiple small bowel perforations, , ileo-cecal mass, adhesions or bands , plastered abdomen, single or multiple small bowel strictures, small bowel strictures with impending perforation. Charokar K and Sadia J have reported similar results in their research.(14,16) Ileostomy was the commonest surgical intervention performed in our study in 39 Patients (83%) followed by adhesiolysis(68%) , primary repair of the perforated viscus (25%), right hemi-colectomy or limited ileocecal resection, stricturoplasty and in a solitary case only omental and peritoneal biopsy with peritoneal lavage was done(17). Different authors and researchers, Charokar K, Sadia J and Ali N have suggested and reported a multitude of surgical procedures in the surgical management of abdominal tuberculosis but it has been rightly stated by Sabooni K(81), that given the diverse presentation and characteristics of abdominal tuberculosis, no definite surgical procedure can be regarded as the standard of care. Hence, we may say that the appropriate surgical procedure and decision has to be taken by operating surgeon based on the performance status and general condition of the patient at the time of surgery, the site and extent of the disease and the expertise of the operating surgeon.

In our study group four patients were treated conservatively and had recovered without any surgical intervention. There was mortality of two patients due poor general condition, fecal peritonitis

and ongoing septicemia at the time of admission. Similar findings have been reported by Sadia J (16)

Conclusion

Abdominal TB constituted a significant percentage (12%) of all cases attending the emergency with an acute abdomen. Abdominal TB is very difficult to diagnose and diagnosis is often delayed till an acute abdomen is presented with. The most familiar clinical was intestinal stricture with or without perforation. Almost all patients needed surgical intervention. Prompt surgical exploration, vigilant postoperative care and administration of ATD helped to treat the patients successfully with their complete cure and rehabilitation.

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