Emergency Presentation of Abdominal Tuberculous to the General Surgeon

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ABSTRACT

To study the varied presentation of abdominal tuberculosis that have presented as acute abdomen. This is a case control analytic non-randomized study conducted at surgical unit 1, Department of Surgery, Lahore General Hospital Lahore June 2007 to June 2009. An analysis was done of the clinical presentation of patients who presented with acute abdomen and after histopathology report were diagnosed to be suffering from abdominal tuberculosis. A total 47 patients were included in the study. A low grad intermittent fever was observed in 39 patients, whereas there was no fever in 8 patients. Ten patients were on anti-tuberculosis therapy for pulmonary tuberculosis. (Secondary tuberculosis). All patients underwent emergency laparotomy. Perforation peritonitis was diagnosed in 18 /47 (38.29%) patients, intestinal obstruction in 14/47 (29.78%) cases, mass abdomen in 10/47 (21.27%) cases, and inflammation of abdominal organs in 3/47 (6.38%) cases and in 2/47 (4.25%) cases no diagnosis could be reached, non specific chronic inflammation.

Key words: Acute abdomen, Tuberculosis, Histopathology

INTRODUCTION

Tuberculosis continues to be a major problem, being responsible for 7-10 million new cases and 6% of deaths world-wide[1]. Abdominal tuberculosis is a common extra pulmonary manifestation of tuberculosis. The wide spectrum of presentation makes abdominal tuberculosis a difficult disease to diagnose[3], sometime only made on postmortem[2], .Abdominal tuberculosis perhaps one of the oldest known disease of mankind and continue, to give rise to diagnostic and therapeutic challenges[4], and its diagnosis is often delayed[5], Most patients of abdominal tuberculosis present as an emergency with the symptoms of obstruction or peritonitis[6],. Although abdominal tuberculosis can be cured medically if treated early enough but it may co-exist even when the patient is on anti tuberculosis treatment. Appropriate Surgical therapy and prompt initiation of anti-tuberculosis therapy can successfully treat abdominal tuberculosis. Our present attempt is to study varied emergency presentation of abdominal tuberculosis at Lahore General Hospital Lahore.

PATIENTS AND METHODS

The current study was conducted at the Department of Surgery Lahore General Hospital Lahore to analyze our experience with histologically proven abdominal tuberculosis that had presented in emergency as an acute abdomen. The aim was to study the varied presentation and to study the involvement of varies organs in abdominal tuberculosis. The study includes to assess the cases reporting to us during two years time. Patients of both sexes, all races and age more than 14 years were considered. The signs & symptoms were studied and categorized as mass abdomen, intestinal obstruction, perforated peritonitis and inflammation of abdominal organ eg. Cholecystitis, appendicitis.

All patients had laparotomy to treat the acute pathology. Peroperatively the extent of the disease was studied and biopsy of related gut, omentum, mesenteric lymph nodes or inflamed organ e.g appendix, gallbladder, was taken. Peritoneal fluid were also taken and sent for culture, sensitivity and LJ medium growth. Post-operatively all patients were started on anti-tuberculosis treatment on the basis of clinical suspicion and it was continued after the confirmation of diagnosis, Otherwise discontinued if the histopathology report and culture both were negative for Mycobacterium tuberculosis.

RESULTS

A total 47 patients were included in the study. 27 were male and 20 were females. History of intermittent low-grad fever was observed in 39 patients whereas no fever in 9 patients.

At laporotomy perforation was found in 18/47 (38.29%) patients, intestinal obstruction was found in 14/47 (29.78%), mass abdomen in 10/47 (21.27%), inflammation abdominal organ in 3/47 (6.38%) cases. In 2/47 (4.25%) cases no diagnosis could be reached, (chronic nonspecific inflammation was

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found.) (Table 1). At laporotomy 41/47 (87.23%) patients had ascites, 36/47 (76.59%) had nodules over their peritoneum.

Table 1: Perioperative finding at laparotomy.

Findings	**n-**
Perforation	18
Intestinal obstruction	14
Mass abdomen	10
Inflammation of abdominal organs e.g., acute appendicitis/ cholecystitis	3
Ascites	41
Nodules over peritoneum	36

Table 2: Involvement of various organs

Findings	**n-**
Jejunum terminal + ileum	17
Ileocaecal region	13
Colon	3
Mililary form	2
Appendix	2
Gallbladder	1
Mixed form (involving multiple organs)	7

DISCUSSION

Abdominal tuberculosis affects all parts of the intestine (Table 2). Because of its varied presentation (Table 1) and its ability to mimic a variety of other abdominal conditions, a high index of suspicion is required[7,8] individual, age 25-44 years are most commonly affected[2]. As the disease is not limited to any specific part of the gut therefore the presenting symptoms also bring all the differential diagnosis related to abdomen into question. Abdullah Jan has showed that 70% of Afghan refugees with acute abdomen had abdominal tuberculosis[9].

Our study shows that all patients had pain abdomen, 74% had fever, intestine tuberculosis (Primary tuberculosis) and 21.26% had pulmonary tuberculosis with intestine tuberculosis (secondary tuberculosis) as compared to observation of 40% patients with primary tuberculosis shown in the study of Abdullah Jan[9] and 24% of patient in the study at Hassan H et al[10]. Our observation regarding concomitant pulmonary tuberculosis was almost similar to the study by Hassan et al[10] and Wang HS et al[11] that showed concomitant tuberculosis to be 24% and 29% of patients respectively.

This study also highlights the fact that abdominal tuberculosis has a wide variety of presentation afflicting, peritoneum, gallbladder and all parts of intestine, 18(38.29%) cases presented with perforation of gut, 14(29.78%) with intestinal obstruction and 10(21.27%) cases with mass abdomen. Although asictes and peritoneal nodules were present in a majority of cases but 10(21.27%) had peritoneal involvement alone and rest of the abdominal organ were spared. Stricture (Obstruction) incidence was (29.78%), compared with (41%) in study conducted by Hassan H et al[10] and compared to 30% Observed by Ha HK et al[13].

We found that all parts of the gut to be involved in this illness (Table 2). But the commonest sites of involvement being the ileum and ileocaecal region and this correspond to the findings of Kapoor VK[12].

CONCLUSION

In cases of acute of abdomen the suspicion for abdominal tuberculosis must be Kept high especially in those cases who have preceding history of undiagnosed fever and weight loss. No part of the intestine is spared from abdominal tuberculosis and its presentation is varied, ranging from pain abdomen to complicated picture of intestinal obstruction, intestinal perforation or peritonitis. Surgery must be performed not only for management but also tissue diagnosis. An early diagnosis and initiation for anti-tuberculosis therapy may prevent the patient from a major disaster.

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