Original Research Paper

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General Surgery

FREQUENCY OF ABDOMINAL TUBERCULOSIS PRESENTING AS ACUTE ABDOMEN

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ABSTRACT Tuberculosis (TB) is an irresistible illness brought about by M. tuberculosis. It has been available in people since relic and has become a significant reason for death and inability in many parts of the world, particularly in developing countries.[1,2] Abdominal Tuberculosis incorporates tuberculosis contamination of gastrointestinal tract, mesentery, lymph nodes and omentum, the peritoneum and related Solid organs, for example, liver and spleen.[3,4] underlying clinical symptoms are vague as the disease includes numerous symptoms with various morphology. No single lab examination is pathognomic.[5],

the **Aim and Objective of** our study to study the frequency of abdominal tuberculosis presenting as acute abdomen to make a early diagnosis of abdominal tuberculosis, with the help of comparing synptoms, and different investigations, and to assess the site of involvement of organ, so mortality and morbidity can be reduced by early intervention.

Material and Methods: 100 patients with acute abdomen is studied, in which observative prospective study is done.

Results: The patient came with acute abdomen in which bowel perforation was the main cause around 45% of patients with acute abdomen. Tuberculosis of abdomen was the cause for 18% of patients. Mainly middle aged group was affected with male dominance from abdominal tuberculosis in which patient presents mainly with pain , fever, constipation and vomiting respectively, and on further examination parietal layer was involved in all patients , and bowel involvement was present in half of patients, in these patients 50% patients showed response to antitubercular therapy rest 50% underwent for surgery and followed up.

Conclusion: Abdominal TB is a respectably phenomenal sign of extrapulmonary TB. Abdominal TB can be of various structures, including luminal, peritoneal, nodal, and visceral. A high rundown of clinical uncertainty is required to make a finish of abdominal TB as a result of the ambiguous clinical signs and radiologic features. Early investigation with brief treatment is essential for a promising expectation. Most cases respond well to medical treatment, and surgery is required in only a minority of cases.

KEYWORDS :

INTRODUCTION

Tuberculosis (TB) is an irresistible illness brought about by M. tuberculosis. It has been available in people since relic and has become a significant reason for death and inability in many parts of the world, particularly in developing countries[1,2] Abdominal Tuberculosis incorporates tuberculosis contamination of gastrointestinal tract, mesentery, lymph nodes and omentum, the peritoneum and related Solid organs, for example, liver and spleen[3,4] underlying clinical symptoms are vague as the disease includes numerous symptoms with various morphology. No single lab examination is pathognomic[5] Radiology frequently neglects to uncover the old style changes depicted in careful course readings. Histopathology and tissue study is however gold standard but time taking and costly. The occurrence of abdominal tuberculosis is expanding because of expanding rate of AIDS[11] It might imitate other gastrointestinal diseases like inflammatory bowel disease, malignancies. Abdominal Tuberculosis with an acute abdomen displays as a gigantic test to the specialist.

AIMS AND OBJECTIVE

AIM:

- To study the **"frequency Of Abdominal Tuberculosis Presenting As A Cute Abdomen In Teerthankar Mahaveer Medical College And Research Centre, Moradabad"** in patients admitted through Emergency/ Surgery OPD.

OBJECTIVES:

- To study the frequency of Abdominal Tuberculosis in acute
- abdomen.
- To study the various mode so fpresentation.
- To study the different types of management.

MATERIALSANDMETHOD

SampleSize:

100 patients with acute abdomen is studied, in which observative prospectivestudyisdone.

Inclusion and Exclusion criteria

The study subjects were chosen as per following criteria:

Inclusioncriteria

All the patients present with acute abdomen with or without previous history of pulmonary tuber culosis.

Exclusion criteria

- Acuteabdominalpaindueto

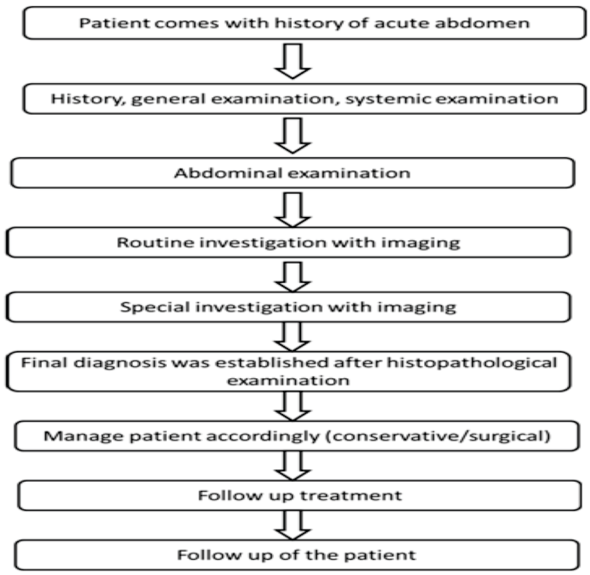
1.Trauma.

2.Obstetricorgynaecologicalcause

3.Urologicalcause

- Patients below 12 years of age.

STUDY PROCEDURE



OBSERVATIONS AND RESULTS

Table 1: Distribution of study population according to Age groups

Agegroups	Frequency	Percentage
≤20years	23	23%
21-30years	22	22%
31-40years	18	18%
41-50years	12	12%
>50years	25	25%
Total	100	100%

Of study population, 23 (23.0%) patients were < 20 years, 22 (22.0%) patients were 21-30 years, 18 (18.0%) patients were 31-40 years, 12 (12.0%) patients were 41-50 years and 25 (25.0%) patients were above 50 year s old.

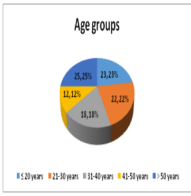


Chart 1: Shows distribution of study population according to Age groups

Table 2: Distribution of study population of patients suffering from abdominal tuberculosis according to Age groups

Agegroups	Frequency	Percentage
≤20years	6	33%
20-30years	6	33%
31-40years	4	22%
41-50years	1	6%
>50years	1	6%
Total	18	100%

Among them, 33% patients were <20 years, 6 (33%) patients were 20-30 years, 4 (22%) patients were 31-40 years, 1 (6%) patient was 41-50 years and 1 (6%) patient was above 50 years.

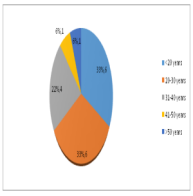


Chart 2: Depicts distribution of study population of patients suffering from abdominal tuberculosis according to Age groups

Table 3: Distribution of study population of patients having abdominal tuberculosis according to gender

Gender	Frequency	Percentage
Male	11	61%
Female	7	39%
Total	18	100%

Among them 11 were male (61%) and 7 (39%) were female.

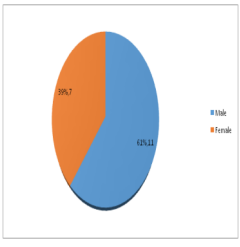


Chart 3: Depicts distribution of study population of patients having abdominal tuberculosis according to gender

Table 4: Distribution of study population according to Diagnosis

DIAGNOSIS	Frequency	Percentage
Acuteappendicitis	18	18
Perforationofintestine(Duodenal)	45	45
Perforationofintestine(Ileal)	13	13
Perforationofintestine(Jejunal)	5	5
Subacuteintestinalobstruction	1	1
Tuberculosis ofintestines peritoneumand mesenteric glands	18	18.0
Total	100	100.0

Acute appendicitis was found among 18 (18.0%), Perforation of intestine (Duodenal) was found among 45 (45.0%), Perforation of intestine (Ileal) was found among 13 (13.0%), Perforation of intestine (Jejunal)was found among 5 (5.0%), Subacute intestinal obstruction among 1 (1.0%) and Tuberculosis of intestines peritoneum and mesenteric glands was found among 18 (18.0%) patients. in which 14(78%) have involvement of bowel and was operated.

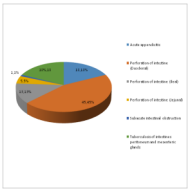


Chart 4: Depicts distribution of study population according to Diagnosis

Table 5: Distribution of study population in Patients suffering from abdominal TB according to Organ involvement:

OrganInvolvement	Frequency	Percent
BOWEL	9	50%
PERITONEALLAYER	18	100%
LYMPHNODE	4	22%
Total	18	

Tuberculosis of intestines, peritoneum and mesenteric glands was found among 18 (18.0%) patients, in which hollow viscus tract involved more frequently in 10 patients (55%),layer of peritoneum was involved in all cases among 18 patients (100%), Lynph node was involved in 4(22%) patients.

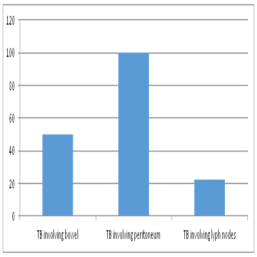


Chart 5: Depicts distribution of study population in Patients suffering from abdominal TB according to Organ involvement.

Table 6: Distribution of study population of patients suffering from abdominal TB according to Management.

Management	Frequency	Percent
Conservative	9	50%
Operative	9	50%
Total	18	100.0%

Conservative treatment was done among 9 (50%) and Operative among 9 (50%) patients.

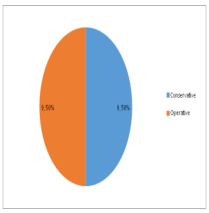


Chart 6: Depicts distribution of study population of patients suffering from abdominal TB according to Management

Table7: Distribution of study population suffering from abdominal TB according to Chief complaint.

In 18 patients who were diagnosed to have abdominal TB presents with following complaints:

Chiefcomplaint	Frequency	Percent
Painabdomen	18	100.0%
Vomiting	2	11%
Fever	12	66%
Historyofweightloss	7	38%
Abdominaldistention	2	11%
Constipation	12	66%

In this study, patients suffering from abdominal tuberculosis , Pain abdomen was reported among 18 (100.0%), Vomiting was reported among 2 (11.0%), Fever was reported among 12 (66.0%), History of weight loss was reported among 7 (38.0%), Abdominal distension was

reported among 2 (11.0%) and Constipation was reported among 12 (66.0%) patients

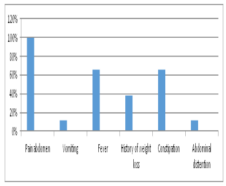


Chart 7: Depicts distribution of study population suffering from abdominal TB according to Chief complaint

Table8:Distribution of study of abdominal tuberculosis patient population according to Follow-up.

FOLLOW-UP	Frequency	Percent
Ileostomyclosure	9	50.0%
AKT-4	18	100.0%

In this study in patients suffering from abdominal tuberculosis. In the follow-up, ileostomy closure was done in 9 patients and AKT-4 was given to all the patients.

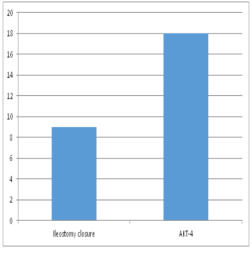


Chart 8: Depicts distribution of study of abdominal tuberculosis patient population according to Follow-up.

DISCUSSION

The introduction of patients with Abdominal TB can make it hard to distinguish the hidden issue. The traditional side effects are not observed with extrapulmonary TB, including chronic cough, intermittent fever, night sweats, weight reduction and blood-stained sputum, are frequently missing in extra-pulmonary TB.

Age Wise Distribution Of Study Population

In our study, 23.0% patients were < 20 years, 22.0% patients were 21-30 years, 18.0% patients were 31-40 years, 12 (12.0%) patients were 41-50 years and 25 (25.0%) patients were above 50 years old. And the 18 patients which were diagnosed to have abdominal tuberculosis, among them, 33% patients were <20 years, 6 (33%) patients were 20-30 years, 4 (22%) patients were 31-40 years, 1 (6%) patient was 41-50 years and 1 (6%) patient was above 50 years, This was similar to the study by *Sharma et al*[6] patients commonly affected were between 21–45 years of age. In the study by Chen et al, age group which was affected was 30-50 years, and 50 years was the mean age.

Gender Wise Distribution Of Study Population

In current investigation, the examination population comprised of 71 (71.0%) male and 29 (29.0%) females. in which 18 patients were found to have abdominal TB, among them 11 were male (61%) and 7 (39%) were female. This finding was in agreement from considers in Taiwan[7,13]in which, male patients involved a noteworthy extent of the influenced population (proportion = 2.5:1 to 4.9:1).

We uncovered a male dominance, which varied from a few past studies[14,15]This was differentiating to the examination by Chou et al, both sexes were about similarly influenced by abdominal TB (male to female proportion = 1.26) and Chen et al (male to female proportion = 1.62).[11]

Site of TB

Acute appendicitis was found among 18 (18.0%), Perforation of intestine (Duodenal) was found among 41 (41.0%), Perforation of intestine (Ileal) was found among 13 (13.0%), Perforation of intestine (Jejunal)was found among 5 (5.0%), Perforation of intestine (non-traumatic) was found among 4 (4.0%), Subacute intestinal obstruction among 1 (1.0%) and Tuberculosis of intestines, peritoneum and mesenteric glands was found among 18 (18.0%) patients, in which hollow viscus tract involved more frequently in 10 patients (55%),layer of peritoneum was involved in all cases among 18 patients (100%), Lynph node was involved in 4(22%) patients, no involvement of strong organs were found.

In the study by *Cho et al*,[8]the most continuous site of abdominal TB was the hollow viscus tract (49.6%) trailed by the involvement of layer of peritoneum (20.1%), strong viscera (16.5%), solid organs (8.6%), and lymph nodes(5.0%).

Symptoms

In this study in patients suffering from abdominal tuberculosis ,Pain abdomen was reported among 18 (100.0%), Vomiting was reported among 2 (11.0%), Fever was reported among 12 (66.0%), History of weight loss was reported among 7 (38.0%), Abdominal distension was reported among 2 (11.0%) and Constipation was reported among 12 (66.0%) patients.

This was like the investigation by Chou et al[12] the clinical signs of abdominal TB are very mutable. Abdominal pain(94.1%) was the most widely recognized clinical introduction in this investigation, trailed by abdominal fullness (91.2%) and anorexia(88.2%).According to an examination performed in India[6] fever was recorded in half of the patients which was as per our examination.

Management

In present study, 18 patients were found to have abdominal tuberculosis in which conservative treatment was done among 9 (50.0%) and operative among 9 (50.0%) patients.

In spite of the fact that nodal and instinctive TB are predominantly treatable therapeutically, medical procedure is still frequently required for associated abdominal TB and the board with confusions, for example, contamination, perforation, and hemorrhage[8]

As noted in past studies[16,17] the anticipation of abdominal TB relies upon brief determination and treatment. Most patients in the investigation by Chen et al demonstrated a decent reaction to hostile to TB treatment, and no backslide happened during long haul development. Also, there were no enduring difficulties which required careful intercession.

A 6-month course of anti-TB treatment for luminal TB is recommended in treatment method[18,19] Two past arranged, randomized concentrates asserted a high fix pace of > 90% after both 6 and 9 months of standard anti-TB therapy[20,21] moreover, some survey studies have exhibited that anti-TB treatment are typically significantly practical and related with low mortality(0–6%) in abdominal TB[7,9,10,22] However, abdominal TB has a high mortality rate (6–20%), and most of patients had extreme complexities and required emergency exploratory laparotomy in a couple of other studies[11,23,24]

SUMMARY AND CONCLUSION

Abdominal TB is a respectably phenomenal sign of extrapulmonary TB. Abdominal TB can be of various structures, including luminal, peritoneal, nodal, and visceral. A high rundown of clinical uncertainty is required to make a finish of abdominal TB as a result of the ambiguous clinical signs and radiologic features. Early investigation with brief treatment is essential for a promising expectation. Most cases respond well to medical treatment, and surgery is required in only a minority of cases.

The diagnosis should be considered in reasonably matured men with alcoholic liver cirrhosis, who have ambiguous signs of abdominal pain, fever, ascites, weight decrease, abdominal distension, and even symptoms of acute abdomen. Early finding and reasonable treatment of abdominal TB may decrease dreariness and mortality.

There is a need to assemble the clinical regard for this real medicinal issue. A high document of clinical question, close by the help of different adjuvant diagnostics approach, is required for right investigation of abdominal TB.

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