



INCIDENCE OF ABDOMINAL TUBERCULOSIS IN PATIENT PRESENTING WITH PAIN IN RIGHT ILIAC FOSSA: A PROSPECTIVE STUDY IN GRMC, GWALIOR.

Surgery

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ABSTRACT

Introduction: Abdominal tuberculosis is sixth most common type of extrapulmonary tuberculosis. It may mimics other gastrointestinal lesions like inflammatory bowel disease, malignancies. The diagnosis is usually delayed due to non specific symptoms and signs. We observed the various presentations of abdominal tuberculosis in our hospital and analyzed the pathology in present scenario.

Aim: To evaluate the incidence of Abdominal tuberculosis in patient presenting Right iliac fossa pain and its association with pulmonary tuberculosis and role of Anti tubercular therapy (ATT) to minimize the further complications.

Method And Materials: The study was carried out as a prospective study in the Department of General Surgery at Gajra Raja Medical College and Jayarogya group of Hospitals, Gwalior (M.P.) for 1½ year from January 2020 to June 2021. A total of 50 patients with pain in right iliac fossa were admitted and studied. The study was approved by the ethical committee of the hospital.

Results: In our study out of 50 cases with pain in right iliac fossa 15 cases were diagnosed with abdominal tuberculosis with slight female predominance. maximum number of cases present between 20-39 years of age. 2 out of 15 had the past history of pulmonary Tuberculosis while 3 having family history of Tuberculosis. Out of 15 abdominal T.B. patients 5 patients underwent for surgery and 10 were managed conservatively & ATT started from which 4 patients responded well to ATT and 6 developed complications and presents in emergency. Out of them 4 having SAIO, 1 having distal ileal perforation and 1 with enterocutaneous fistula.

Conclusion: From the observation and result of my study most of patient Presented with chronic pain in Right iliac fossa has been diagnosed with ileocecal TB. Study show that 40% patients respond well to ATT and 60% develop complication with symptoms of obstruction and perforation during follow up that underwent for Surgery later on.

KEYWORDS

Abdominal tuberculosis; Anti tubercular therapy (ATT); right iliac fossa

INTRODUCTION

Abdominal tuberculosis is sixth most common type of extrapulmonary tuberculosis. Abdominal tuberculosis denotes tuberculosis infection of gastrointestinal tract, peritoneum, lymph nodes, and solid organs i.e. spleen, liver, and pancreas. Abdominal tuberculosis is a major public health problem in developing countries. It may mimics other gastrointestinal lesions like inflammatory bowel disease, malignancies. The diagnosis is usually delayed due to non specific symptoms and signs. We observed the various presentations of abdominal tuberculosis in our hospital and analyzed the pathology in present scenario.

Aim

To evaluate the incidence of Abdominal tuberculosis in patient presenting Right iliac fossa pain and its association with pulmonary tuberculosis and role of Antitubercular therapy (ATT) to minimize the further complications.

MATERIAL AND METHOD

The prospective study was conducted in GRMC Gwalior. All cases presented with pain in right iliac fossa were Investigated with USG, X-ray chest, AFB, CECT Abdomen, colonoscopy and biopsy. Most of the patients were diagnosed with clinical history, USG and CECT findings. ATT started in patients who were diagnosed for Abdominal Tuberculosis and there followup was done for response to treatment.

RESULT

During the study period total 15 out of 50 cases were diagnosed as a case of Abdominal Tuberculosis which were presented as chronic Right iliac fossa pain with slight Female predominance. These patients represented a wide age group of distribution of 17 to 60 years with maximum number of cases presenting between 20-39 years. Only 2 out of 15 had the past history of pulmonary Tuberculosis while 3 having family history of Tuberculosis. The Laboratory finding revealed elevated ESR in 9 cases, anemia in 11 cases and hypoproteinemia in 13 patients. Out of 15 abdominal T.B. patients 5 patients underwent for

surgery and 10 were managed conservatively & ATT started. 5 patients underwent for surgery are admitted with complaints of pain in right iliac fossa came in emergency department presented with Subacute Intestinal Obstruction (SAIO) in 4 patients and perforation in 1 patient. Antitubercular therapy started in 10 patients presented with chronic pain in right iliac fossa, CT and USG finding suggestive of thickening in distal ileum, IC junction, ascending colon suggestive of Koch's abdomen 4 patients responded well to ATT and 6 developed complications and presents in emergency. Out of them 4 having SAIO, 1 having distal ileal perforation and 1 with enterocutaneous fistula.

Colonoscopy biopsy of 4 patients, two having granulation tissue with chronic infection and one with chronic non specific inflammation and one came positive for adenocarcinoma of colon on histopathology report.

Table 1 Diagnosis Of Different Study Participants

Diagnosis	N	%
Abdominal Tuberculosis (2 pulmonary TB)	15	30%
Acute Appendicitis	16	32%
Appendicular Lump	7	14%
Psoas Abscess	4	8%
Carcinoma Colon	2	4%
Colitis	5	10%
Adnexal Mass	1	2%
Total	50	100%

Table 2 Age And Gender Wise Distribution Of Abdominal Tuberculosis Cases

Age Group	Gender		Total	P Value
	Male	Female		
<20 Year	1	1	2	0.691
20-29 Year	1	1	2	
30-39 Year	2	3	5	
40-49 Year	0	1	1	

50-59 Year	0	2	2	
60-69 Year	0	0	0	
≥70 Year	2	1	3	
Total	6	9	15	

Table 3 : Management Of Abdominal Tuberculosis Cases

Management	N	%
Conservative	10	66.7%
ATT with Surgery	5	33.3%
Total	15	100%

Table 4 : Follow Up Outcome Of Abdominal Tuberculosis Cases

Follow up	N	%
Stable	9	60%
Readmitted with emergency	6	40%
Total	15	100%

Table 5 : Distribution Of Study Participants According To Follow Up Findings

Diagnosis	N	%
On ATT Responding Good	4	8%
Present with enterocutaneous fistula	1	2%
Present with perforation	1	2%
Present with SAIO	4	8%
Stable	40	80%
Total	50	100%

Table 6 : Age And Gender Wise Distribution Of Abdominal Tuberculosis Cases

Presentation	Gender		Total	P Value
	Male	Female		
On ATT Responding Good	3	1	4	0.426
Present with enterocutaneous fistula	0	1	1	
Present with perforation	1	0	1	
Present with SAIO	2	2	4	
Stable	3	2	5	
Total	6	9	15	

DISCUSSION

Pulmonary TB is most common form of Tuberculosis. Abdominal tuberculosis is 6th most common form of extra pulmonary TB. The diagnosis of Abdominal tuberculosis is delay due to its bizarre presentation. It can affect any age group patients having history of constipation, Anorexia and loss of weight. Chronic pain in abdomen (right iliac fossa) was most common presentation of ileocecal tuberculosis. In our study we included the patients presenting with right iliac fossa pain.

In our study patients present with chronic pain in right iliac fossa, 30% patients were abdominal TB with slightly female Predominance and involvement of young population who belongs to lower socioeconomic status. In our study we found most of the patients present with on and off history of SAIO. 50% patients were managed successfully with early diagnosis and use of ATT. In health care deprive area clinical diagnosis with history, USG and early use of ATT helps to minimize the complication. Patients present with similar complaints may be of carcinoma cecum, ileocecal tuberculosis, carcinoma right colon to differentiate them colonoscopy biopsy has done.

In our study one patient with Psoas abscess was found. Pus came to AFB positive for Tuberculosis patient was not responding to ATT and lead to enterocutaneous fistula. CECT Abdomen shows thickening of IC Junction and Distal ileum.

CONCLUSION

From the observation and result of my study most of patient Presented with chronic pain in Right iliac fossa has been diagnosed with ileocecal TB. most of them Present with history of obstruction and managed conservatively by ATT. Study show that 40% patients respond well to ATT and 60% develop complication with symptoms of obstruction and perforation during follow up that underwent for Surgery later on.

REFERENCES

1. Pedaveeraj E. Abdominal tuberculosis. In : Textbook of pulmonary and extrapulmonary tuberculosis. 3rd edition. New Delhi: interprint 1998 p.250-2.
2. Addison N.V. & J.M. Findlay. Abdominal Tuberculosis. Current Surgical practice vol. 3 page, 48-61(1982).
3. Goldman KP. AIDS and tuberculosis. Tubercle 1988; 69: 71-2.
4. Tan K-K, Chen K, Sim R: The spectrum of abdominal tuberculosis in a developed

country: a single institution's experience over 7 years. J Gastrointest Surg 2009, 13:142-147.

5. Rathi PM, Amarapurkar DN, Parikh SS, Joshi J, Koppikar GV, Amarapurkar AD, et al. Impact of human immunodeficiency virus infection on abdominal tuberculosis in western India. J Clin Gastroenterol 1997;24: 43-8.
6. Sharma MP, Bhatia V: Abdominal tuberculosis. Indian J Med Res 2004;120:305-315.
7. Tandon HD, Prakash A. Pathology of intestinal tuberculosis and its distinction from Crohn's disease. Gut 1972; 13 :260-9.