

MANAGEMENT OF ABDOMINAL TUBERCULOSIS IN SURGERY EMERGENCY AT TERTIARY CARE CENTRE

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Abstract

Abdominal tuberculosis is a disease that could not be diagnose easily. Every age group is affected in India. most common symptoms is pain in abdomen usually around umbilicus, on and off fever ,abnormal bowel sound, loss of weight, loss of appetite, altered bowel habit. Clinical evaluation, biochemical and radiological parameter only can help to diagnose abdominal tuberculosis but till date no single confirmatory test is available. Mostly these patients treated as a case of sub acute intestinal infection with unknown cause in local hospitals. Medical management is available easily anywhere in India either in government or private setup. Surgery is performed in some cases where recurrent obstruction, perforation or enterocutaneous fistula is present. 20 cases were study during this period in surgical emergency.

INTRODUCTION

Abdominal tuberculosis is the sixth most common form of extra-pulmonary site [1]. Abdominal tuberculosis (TB) is less common in western countries than developing countries and associated with significant morbidity and mortality. In developing countries poor living conditions, overcrowding and limited access to health care facilities are the major causes of the disease [2] abdominal tuberculosis usually involve, ileocaecal junction, small bowel, mesenteric lymph nodes, peritoneum and sometimes solid organ may involve. The clinical manifestations of abdominal tuberculosis can mimic with many other diseases that causing delay in diagnosis [3]. Most common complication of intestinal tuberculosis is intestinal obstruction attributed to strictures or by [4].another serious complication is perforation, that accounts 3-9% in India and usually proximal to strictures lesion or adhesion [5] tubercular perforation is 2nd most common cause of perforation after typhoid perforation [2].

A high index of suspicion is very important while dealing with a case of abdominal tuberculosis. Many a time a therapeutic trial of ATT based on clinical suspicion can work wonders in these patients.

Objectives

The main objective is provide, evidence-based practices for suspecting, diagnosing and managing of abdominal tuberculosis in developing country.

Aims

The main purpose of this study to inform rational treatment protocols at primary and secondary level health care, and places like as medical college that have sufficient expertise, clinical capacity and resources. The guidelines may help to diagnosing of abdominal tuberculosis, and to guide general practitioners and field health workers. The guidelines are also intended to inform health-care providers, TB policy makers about best practice based on a review of the current evidence

Inclusion Criteria

High clinical suspicious case,
 Radiological findings
 And biochemical parameter
 Smear microscopy and mycobacterium culture
 Sub acute intestinal obstruction
 Perforation, obstruction, fistula

Exclusion Criteria

Gene/XpertMTB
 IGRA/INTERFEON GAMMA
 FNAC
 FLUID EXAMINATION
 Laparoscopy

Clinical Features

SYMPTOMS	Abdominal pain(commonest symptoms) Anorexia (2 nd most common) fever Loss of weight and appetite Altered bowel habbit Nausea and vomiting Abnormal bowel sound Visible peristalsis
SIGN	Pallor face, Lean and thin Build up Raised temperature Tender and doughy Abdomen Any Lymph node may be enlarged, cervical (most common), axillaries, inguinal

Radiological Findings

X RAY ABDOMEN AP ERECT VIEW	MULTIPLE AIR FLUID LEVEL,PERFORATION
XRAY CHEST PA VIEW,	ENLARGED HILAR LYMPH NODE,PLEURAL EFFUSION
USG WHOLE ABDOMEN	ILEOCAECAL THICKENING, ENLARGED MESENTRIC LYMPHNODES THICKENING OF TERMINAL ILEUM, ASCITIS,SLUGGISH BOWEL MOVEMENT,SEALED PERFORATION
CT SCAN WHOLE ABDOMEN	ILEOCAECAL THICKENING, ENLARGED MESENTRIC LYMPHNODES THICKENING OF TERMINAL ILEUM, ASCITIS,SLUGGISH BOWEL MOVEMENT,SEALED PERFORATION ASCENDING COLON AND CAECUM WALL THICKENING

Biochemical Parameters

INCREASED LYMPHOCYTES	5(25%)
RAISED ESR (ERYTHROCYTE SEDIMENTATION RATE)	12(60%)
RAISED S.A.D.A.(SERUM ADENOSINE DEAMINASE)	16(80%)
MONTOUX TEST	8(40%)

DISCUSSION

During my residency period from 2013 to 2017 at KGMU, in 20 cases of abdominal tuberculosis were seen in emergency and followed up for 1 year, in which all 13 cases operated first time successfully, 2 cases were operated outside and re-explored successfully, 2 cases died within 24 hour after operation as exploration could not be proceed because of cocoon formation and multiple fistula, 3 cases were died because of multiple fistula formation, lack of nutritional support postoperatively.

Actually ,Abdominal tuberculosis is a great mimicker of all gastrointestinal disease like as typhoid fever, appendicitis inflammatory bowel disease, intestinal worm infestations in children's, even cancer of large bowel in old age [8,9]. Even experienced clinicians easily get confused because of non specific clinical presentation .at periphery most of the clinicians treat as a case of sub acute intestinal obstruction and manage conservatively without any definitive diagnosis. Because most of them don't take proper history and family history and clinical examination due to which they missed early clinical diagnosis. However most common clinical site is still ilieocaecal region [10]. And most common complaint is pain in abdomen usually around umbilicus, abnormal bowel sound, altered bowel habit, loss of weight, loss of appetite, may be with low grade fever. Abdominal tuberculosis is essentially a medical disease and surgical interventions should be reserved for complications' including obstruction, perforation, fistula, or bleeding [4, 5, 9]. Unusual presentation is very challenging for clinicians due to this diagnosis are easily missed. What we have learned from our mistakes that these lessons are very important for young surgeons who may not have faced abdominal tuberculosis especially in developed countries. And definitely day by day incidence is decreasing due to better health policy in India.

Detailed clinical evaluation including family history, personal history, residence, occupation each one is very important to find out abdominal tuberculosis but clinicians usually missed. There is misconceptions that abdominal tuberculosis is diseases of poor and usually associated with pulmonary tuberculosis normal sonological findings are enlarged mesenteric lymph nodes, thickening of terminal ileum, ascitis, sluggish bowel movement sealed perforation. However ct scan is preferred investigation, but nonspecific(6) .even normal ct scan does not rule out abdominal tuberculosis. In emergency usually strong suspicious cases were referred from elsewhere that could not be managed conservatively with or without ATT; therefore in emergency cases usually we need to performed laparatomy. Laparoscopy procedure was not performed because of injury to bowel due to adhesion, cocoon formation and fistula formation [7] most of them who were nonsurgical cases and undiagnosed with strong suspicious of abdominal tuberculosis, serological investigation, Hb, lymphocytes, ESR, S.ADA were send .radiological investigation usually in all cases x ray chest, abdomen and USG were advised, in some cases CT SCAN was advocated. Usually diagnosis was confirmed on basis of serological test, radiological findings were used only to strengthen diagnosis. Now, Decreased hemoglobin, increased lymphocyte, ESR, and serum ADA were used routinely mountoux test also done .strong clinical history with

any one biochemical abnormality support diagnosis of abdominal tuberculosis radiological findings only support the diagnosis not confirm.

On the basis of above symptoms, sign, biochemical and radiological parameter, I have drawn a conclusion that any 2 symptoms with any 2 sign with any 2 biochemical parameter with any 2 radiological findings in a single patient strongly suggestive of positive case of abdominal tuberculosis.

CONCLUSION

Abdominal TB is quite a diagnostic challenge due to its vague clinical symptoms, nonspecific radiological features, and poor sensitivity and specificity of diagnostic tests. Hence, clinicians should have a high index of suspicion to diagnose. Most cases respond very well to medical management and a small fraction requires surgical intervention if diagnosed early.

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