OPEN ACCESS

Saudi Journal of Medicine

Abbreviated Key Title: Saudi J Med
ISSN 2518-3389 (Print) | ISSN 2518-3397 (Online)
Scholars Middle East Publishers, Dubai, United Arab Emirates
Journal homepage: https://saudijournals.com

Case Report

Tuberculous Appendicitis – A Rare Case Report

Dr. Natraj M[1*], Dr. Adhiyaman M[2], Dr. Nisha Parveen[3], Dr. S P Burma[4], Dr. Vignesh S[5]

[1]Assistant Professor, Department of chest & TB, ANIIMS, DHS Annexe Building Near Rear Gate, G.B.Pant Hospital, Atlanta Point, Port Blair-744104
[2]Post graduate, Department of General surgery, Shri Satya Sai Medical College and Research Institute, Tiruporur-Guduvancherry Main Road, Ammapettai, Chengalpet Taluk, Kancheepuram District, Nellikuppam, Tamil Nadu 603108
[3]Senior Resident, Department of chest & TB, ANIIMS, Port Bair DHS Annexe Building Near Rear Gate, G.B.Pant Hospital Atlanta Point , Port Blair-744104
[4]Professor, Department of chest & TB, ANIIMS, Port Bair DHS Annexe Building Near Rear Gate, G.B.Pant Hospital Atlanta Point, Port Blair-744104
[5]Junior Resident, Department of chest & TB, ANIIMS, Port Bair DHS Annexe Building Near Rear Gate, G.B.Pant Hospital Atlanta Point , Port Blair-744104

DOI: 10.36348/sjm.2022.v07i08.001 | **Received:** 21.06.2022 | **Accepted:** 26.07.2022 | **Published:** 04.08.2022

***Corresponding Author:** Dr. Natraj M
Assistant Professor, Department of chest & TB, ANIIMS, DHS Annexe Building Near Rear Gate, G.B.Pant Hospital, Atlanta Point, Port Blair-744104

Abstract

Gastrointestinal tuberculosis accounts for nearly 3 % of the total extra pulmonary cases. Tuberculous appendicitis is a rare type of gastro intestinal tuberculosis, seen only in 0.1 to 0.3% of cases. Here we present a tuberculous appendicitis case in a 20 year old female.

Keywords: Tuberculosis, gastrointestinal tuberculosis, tuberculous appendicitis.

INTRODUCTION

Tuberculosis has been one of the most notorious diseases in developing countries like India often associated with high morbidity and mortality [1]. India accounts for nearly one fifth of the global Tb incidences [2]. Gastrointestinal Tb accounts for 3% of extra pulmonary TB, most common site being the ileocaecal region [1]. Despite appendix lying close to the ileocaecal region, incidence of TB appendix is very rarely reported [3]. There are no tell tale signs and symptoms of tubercular appendicitis. Diagnosis is usually made after the histopathology report of the appendix specimen [1]. Appendicular tuberculosis is believed to be because of hematogenous spread, and can either primary or secondary, the later being more common that primary due to the spread from the already existing infection within the abdomen [3].

CASE PRESENTATION

25 year old female patient presented with abdominal pain, vomiting and fever. Pain was in the right lower abdomen which was acute in onset, continuous and associated with vomiting. Vomit was copious in amount, watery containing food particles, not blood stained. Fever was high grade not associated with chills and rigor. Patient had a history of similar six months back which was mild in nature. She had regular bowel habits. There was no change to her weight or appetite. Her past medical and surgical history was not significant along with personal, family and menstrual history.

After getting the due consent abdominal examinations were done which showed tenderness in the right iliac fossa along with rebound tenderness. There was no other palpable lump, guarding or rigidity.

Her total counts were elevated while rest of the blood investigations was normal. CT abdomen showed inflamed and thickened appendix. Based on the clinical and radiological presentation diagnosis of appendicitis was made and was taken up for surgery for getting informed consent. On laprotomy large appendix was noted in the paracolic gutter with normal ileum, cecum and mesentery (Fig 1). Post op period was uneventful. Wound was treated with routine antibiotics and dressing. Histopathological examination of the

appendix revealed caseating granuloma, lumen filled with neutrophilic exudates and langhans gaint cells (Fig 2). Gene X pert from the appendix was positive for rifampicin sensitive tuberculosis. With no involvement of other organ diagnosis of primary tubercular appendicitis was established. Patient was started on anti tubercular medication based on NTEP guidelines according to her body weight.

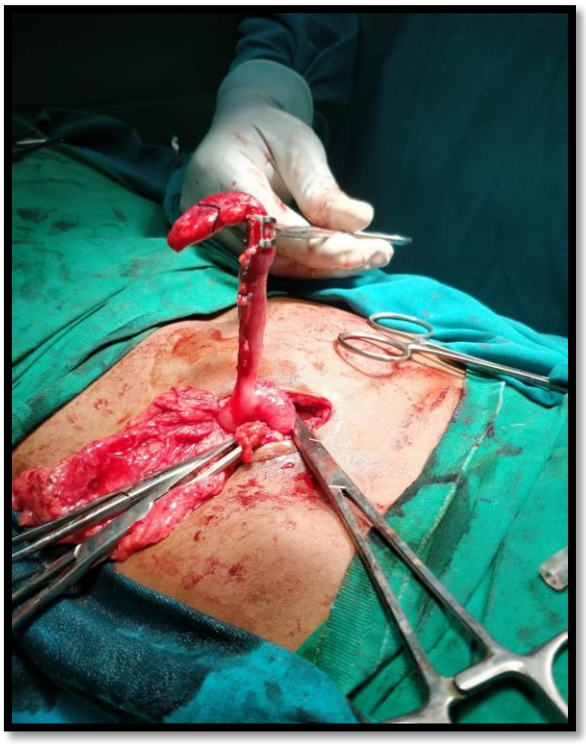

Fig 1: Intraoperative finding of large appendix

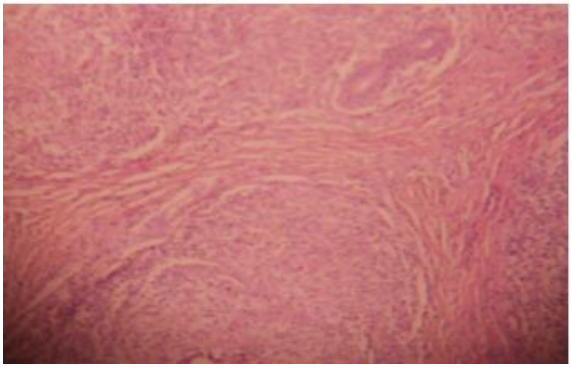

Fig 2: Microphotograph showing granulomas with Langhans' giant Cells

DISCUSSION

Gastrointestinal TB accounts for nearly 3% of extra pulmonary tuberculosis cases [4]. Although any portion of the GI tract can be involved, terminal cecum and ileum are most commonly involved [5]. Appendicular TB is a lesser known entity due to its rare incidence and it was first reported by Corbin in the year 1873 [6]. TB appendix can be either primary or secondary. Primary form includes the infection directly by mycobacterium tuberculosis while secondary form involves spread from the excising infective foci. Appendicular involvement is rare due to the fact that it is having minimal contact with the intestinal mucosa [7]. There are no distinctive clinical or radiological features to suggest tubercular appendicitis preoperatively therefore making the diagnosis only possible with the histopathology report of the resected appendix or a diagnosis of exclusion. Appendicular TB is believed to be more commonly presenting as a chronic form with acute flare up of appendicitis secondary to TB. But many authors do not accept this, hence making the diagnosis unconfirmed until the histology feature [1]. On histology ulcerative form of appendicular appendicitis is the most common form. Other diseases like ulcerative colitis, sarcoidosis and parasitic diseases can also show granulomatous changes [8]. Surgical resection followed by standard anti tubercular treatment is the treatment of choice [2].

CONCLUSION

Since TB is highly prevalent in India one should always remember that tuberculosis can cause appendicitis, even though it is rare. It is also suggested that the resected specimen must be sent for histopathological exanimation.

REFERENCES

1. Ambekar, S., & Bhatia, M. (2021). Appendicular tuberculosis: a less encountered clinical entity. *BMJ Case Reports CP*, *14*(2), e237718.
2. Chandra, B. S., Girish, T. U., Thrishuli, P. B., & Vinay, H. G. (2013). Primary tuberculosis of the appendix: a rare cause of a common disease. *Journal of surgical technique and case report*, *5*(1), 32-34.
3. Singh, M. K., & Kapoor, V. K. (1987). Tuberculosis of the appendix--a report of 17 cases and a suggested aetiopathological classification. *Postgraduate medical journal*, *63*(744), 855-857.
4. Wani, I., Wani, R. A., & Malik, A. A. (2014). Abdominal tuberculosis. OA Case Rep, 3(5), 45.
5. Jameson, J. L., Kasper, D., Hauser, S., Longo, D., Fauci, A., & Loscalzo, J. (2008). Harrison Principles of Internal Medicine. New York: McGraw-Hill; Chapter 158.
6. Scott, J. R. (1917). Tuberculosis of the Appendix. *Annals of surgery*, *66*(6), 648-653.
7. Borrow, M. L., & Friedman, S. (1956). Tuberculous appendicitis. *The American Journal of Surgery*, *91*(3), 389-393.
8. Gupta, S. C., Gupta, A. K., Keswani, N. K., Singh, P. A., Tripathi, A. K., & Krishna, V. (1989). Pathology of tropical appendicitis. *Journal of clinical pathology*, *42*(11), 1169-1172.