PriMera Scientific
Medicine and Public Health
Volume 3 Issue 6 December 2023
DOI: 10.56831/PSMPH-03-103
ISSN: 2833-5627

PriMera Scientific Publications

Extrapulmonary Tuberculosis, An Unsighted Cause of Acute Abdomen - A Case Report

Type: Case Report
Received: October 26, 2023
Published: November 22, 2023

Citation:
Chishti Tanhar Bakth Choudhury., et al. "Extrapulmonary Tuberculosis, An Unsighted Cause of Acute Abdomen - A Case Report". PriMera Scientific Medicine and Public Health 3.6 (2023): 16-19.

Chishti Tanhar Bakth Choudhury[1]*, Md Fazlur Rahman[2] Nazmin Rahman[3] and SM Touhidul Hoque[4]

[1]*Associate Prof of Surgery, SMAMC, Dhaka*

[2]*Consultant, Surgery, 250 Bedded Hospital, Meherpur*

[3]*Assistant Prof of Surgery, SMAMC*

[4]*Asstt Registrar, Surgery Dept, SMAMC*

***Corresponding Author:** Chishti Tanhar Bakth Choudhury, Associate Prof of Surgery, SMAMC, Dhaka.

Abstract

Tuberculosis has been one of the leading causes of high morbidity and mortality even in advanced science now a days. Tuberculosis is concerning for resistance pattern and MDR TB. Long term therapy is contravening factors for developing resistance as majority times patient are careless for follow up and discontinue medications after apparent improvement. Gastrointestinal TB accounts for 3% of extrapulmonary TB. The most common site of involvement being the ileocecal region. Vermiform appendix lies in close proximity to ileocecal area. Despite this, incidence of TB in appendix is rarely reported. There are no pathognomic signs and symptoms to prompt preoperative diagnosis of tubercular acute appendicitis. Diagnosis is usually made after histological reports of the appendix. Incidence of appendicular TB in all appendectomies has been reported varying from 0.1 to 0.3%, 1-3. This case report shows a female admitted with features of acute appendicitis and was operated on emergency basis. Her appendix surface was grossly reddened, thick, edematous, short and firmly adhered with cecum. During appendicectomy cecal serosa was injured and repaired. Histopathology reveals appendicular TB. Patient was treated according to anti TB regime.

Keywords: TB; V Appendix; HPR; Anti TB drug

Introduction

Review of literature for appendicular tuberculosis between 1909 to 2016 using pubmed and google scholar revealed that approximately 173 cases have been reported. The exact mechanisms by which appendix develops tuberculosis remains unclear. The direct penetration of intestinal mucosa by swallowed organisms seems to be the principal reason 1-3. Direct extension from the adjacent intestinal structures like cecum or ileum and rarely genitourinary tract and by lymphatic or hematogenous

spread 1-4.

Case presentation

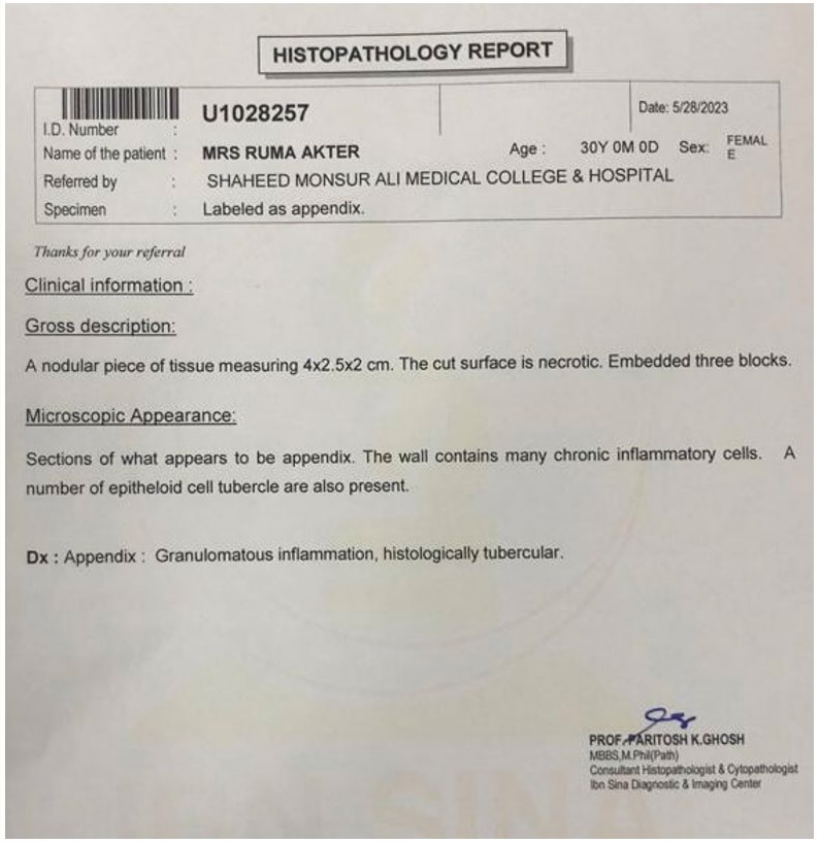
A 30 years female, housewife presented to A&E dept. with the complaints of severe abdominal pain, low grade fever, nausea for one day. After clinical and pathoradiological evaluation, it was diagnosed as acute appendicitis. Per operatively appendix was broad thick, short and surface was reddened. During appendicectomy, for dense adhesion with cecum, serosa of cecum was injured and repaired. Her post toperative period was uneventful. Surprisingly Histopathology report (HPR) reveals granulomatous lesion consisted with TB. The patient was treated with anti TB according to medical regime.

Discussion

Any portion of GIT can be involved with TB, the most common site being ileum or cecum. The appendix is fifth most common place for TB in GIT. According to the report of WHO (2013), there was an estimated 8.6 million annual incidence of TB globally, and 1.3 million people died of the disease in 2012. Appendicular TB was first recognized by Corvin in 1873. Dymock et al. Tubercular appendicitis is a disease of young and females are more commonly affected than males. Clinical presentation may be acute, chronic or incidental. The acute form may be indistinguishable from acute suppurative appendicitis. Chronic form is more common and it may present with recurrent attack of appendiceal colic, diarrhoea and vomiting. The latent type is often discovered after an incidental appendicectomy.

A six months course of anti TB drugs consist of intensive phase of 8 weeks and continuous phase of next 4 months is considered adequate. 8 weeks course include Isoniazide, Rifampicin, Pyrazinamide and ethambutol followed by Isoniazide and Rifampicin 7-9.

Figure 1: Structure of resected appendix.



HISTOPATHOLOGY REPORT

I.D. Number : U1028257 Date: 5/28/2023

Name of the patient : MRS RUMA AKTER Age : 30Y 0M 0D Sex: FEMALE

Referred by : SHAHEED MONSUR ALI MEDICAL COLLEGE & HOSPITAL

Specimen : Labeled as appendix.

Thanks for your referral

Clinical information :

Gross description:

A nodular piece of tissue measuring 4x2.5x2 cm. The cut surface is necrotic. Embedded three blocks.

Microscopic Appearance:

Sections of what appears to be appendix. The wall contains many chronic inflammatory cells. A number of epitheloid cell tubercle are also present.

Dx : Appendix : Granulomatous inflammation, histologically tubercular.

PROF. PARITOSH K.GHOSH
MBBS,M.Phil(Path)
Consultant Histopathologist & Cytopathologist
Ibn Sina Diagnostic & Imaging Center

Conclusion

Primary tuberculosis of appendix is extremely rare. A preoperative diagnosis is difficult and rarely possible. A high index of suspicions is required for the diagnosis. The most common presentation is chronic recurrent appendiceal colic. Histopathological examination is mandatory for every appendiceal specimens. Appendicectomy without histology of specimen is disastrous for the patient and community as MDR TB is major concern for spreading and developing resistance.

References

1. Rasheed S., et al. "Intraabdominal and gastrointestinal tuberculosis". Colorect dis 9.9 (2007): 773-83.
2. Abdulgafar B. "Granulomatous diseases and granuloma of the appendix". Int. j surg pathol 18.1 (2010): 14-20.
3. Barhagallo F., et al. "Alpendicular tuberculosis: the resurgence of an old disease with difficult diagnosis". World j Gastroenteral 16.4 (2010): 518-521.
4. Borrow ML and Friedman S. "Tuberculous appendicitis". Am. J. Surgery 91.3 (1956): 389-393.
5. Bercu TE, Rubin ZA and Agopian VG. "Tuberculous appendicitis". Am.j.med 124.2 (2011): e9-e10.
6. Vinay MG., et al. "Primary Tuberculosis of the appendix: A rare cause of a common disease". J Surg Tech case report 5.1 (2013): 32.
7. World health organization. Treatment of tuberculosis: Guidelines for treatment of drug susceptible Tuberculosis and patient care.

8. Singh MK and Arunabh KVK. "Tuberculosis of the appendix- a report on 17 cases and a suggested etiopathollgical classification". Postgrad Med. J 63.744 (1987): 855-857.
9. World health organization. Global Tuberculosis report 2019.
10. Bhushan VST, Mulla MA and Kumar V. "Ruptured appendix in Tuberculous abdomen". RGUHS Med. Sci 5.1 (2015).