

Inguinal Hernia Sac Tuberculosis-A Rare Presentation of Abdominal Tuberculosis: Case Report and Review of Literature

Dr. Talib Hussain¹, Dr. Mohd Riaz², Dr. Naveed Anjum Qureshi³

¹ Lecturer, Department of Surgery, Government Medical College Jammu, Jammu and Kashmir, India.

² Assistant Professor, Department of Surgery, Government Medical College Jammu, Jammu and Kashmir, India.

³ Assistant surgeon, Directorate of Health Services, Jammu and Kashmir, India.

Corresponding author: Dr. Talib Hussain

Abstract: Tuberculosis is very common in developing countries like India, be it pulmonary or extrapulmonary. Abdomen is sixth commonest site of involvement in extrapulmonary TB. Abdominal TB may manifest as Tuberculous peritonitis, tuberculous mesenteric lymphadenitis, gastrointestinal tuberculosis and TB of solid abdominal viscera. Here we report a case of TB of inguinal hernia sac in a young male who was posted for elective inguinal mesh hernioplasty for B/L indirect inguinal hernia.

Keywords: Abdominal Tuberculosis, Miliary Tubercles.

Date of Submission: 26-10-2019

Date of Acceptance: 11-11-2019

I. Case Report

A 20 year old male presented to surgical OPD with complaints of painless swelling over right and left inguinal regions since last one year. On clinical examination patient had B/L uncomplicated indirect inguinal hernia. Otherwise the examination of abdomen and external genitalia was normal and so was the general physical examination. Pre-operative investigations revealed blood group of A-ve, Hb of 11.5gm%, TLC 8000/mm³ with neutrophils 55, lymphocytes 35, monocytes 5 and eosinophils 5. Fasting blood sugar 121mg/dl. Renal function tests were normal and chest x-ray was also normal. Pre-anaesthetic check up was done and patient was posted for B/L inguinal mesh hernioplasty. Intra-operatively left indirect inguinal hernia sac was separated from the cord structures. Sac was opened, it was empty, only scanty clear fluid was present but surprisingly inner surface of sac was studded with military tubercles. High ligation of sac was done, redundant sac excised and modified Bassini repair was done. Excised sac sent for histopathological examination. The similar findings were noted on opening the right inguinal hernia sac, procedure repeated and excised hernia sac sent for histopathological examination.



Figure 1. Intraoperative image showing multiple tubercles along inner aspect of hernia sac.

Post-operative recovery was uneventful. Histopathology of both the hernia sacs showed dense fibro collagen and adipose tissue admixed with numerous well formed epithelial cell granulomas and langhans type of giant cells along with chronic lymphomononuclear inflammation and focal caseation necrosis suggestive of tuberculosis.

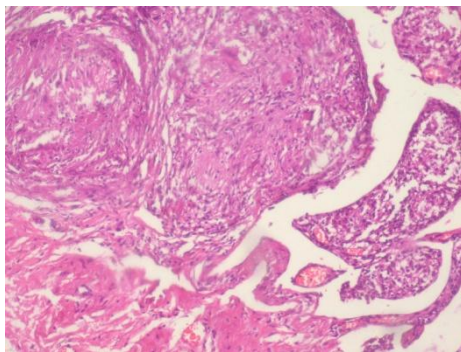


Figure 2. Histopathology from excised Hernia sac showing granulomatous inflammation with langhan giant cells with caseation necrosis.

Post-operatively ESR was done which was 15mm at the end of 1st hour. Serum ADA was 13 IU/L and mantoux was 8mm. The patient was put on standard antitubercular therapy, completed the full course and doing well on follow up.

II. Discussion

Abdomen is sixth commonest site of involvement in extrapulmonary TB and the involvement may be in the form of tuberculous peritonitis, tuberculous mesenteric lymphadenitis, gastrointestinal tuberculosis and tuberculosis of solid abdominal viscera like liver, spleen and pancreas. In gastrointestinal tuberculosis, most common site being ileocaecal region followed by ascending colon, jejunum, appendix, duodenum, stomach, esophagus, sigmoid colon and rectum¹. The association between abdominal tuberculosis and inguinal hernia is rare, and a very few cases have been reported in literature²⁻³. In our case there were no symptoms or signs suggestive of tuberculosis, more-over the ascitic fluid was also scanty and insufficient for cytological and biochemical analysis. Biopsy is the most effective method of diagnosing tuberculosis. So presence of tubercles in omentum or hernia sac during hernia surgery should be biopsied and subjected for histopathological examination⁴. Presence of granulomatous inflammation with langhan giant cells with caseation necrosis is diagnostic of tuberculosis. Basrur et al suggested modified Bassini repair as the method of treatment to avoid mesh infection and recurrence in future⁵. All patients must receive complete course of antitubercular therapy post operatively⁶.

III. Conclusion

Tuberculosis of inguinal hernia sac is rare. If the contents of hernia sac or hernia sac itself appears suspicious, a biopsy should be obtained so that this unusual form of abdominal tuberculosis may be detected early especially in the absence of constitutional and abdominal symptoms so that timely treatment can be initiated to decrease the complications.

References

- [1]. Marshall JB. Tuberculosis of the gastrointestinal tract and peritoneum. *Am J Gastroenterol.* 1993;88:989-99.
- [2]. Narasimharaw KL, Pradeep R, Mitra SK, Pathak IC. Abdominal tuberculosis presenting as inguinal hernia. *Indian Pediatr.* 1983;20:790-1.
- [3]. Rao BJ, Kabir MJ, Varshney S: Richter's hernia: A rare presentation of abdominal tuberculosis. *Indian J Gastroenterol.* 1999;18(1):33.
- [4]. Vashist M, Singhal N, Verma M, Deswal S, Mathur S. Abdominal Tuberculosis In A Hernia Sac: A Rare Presentation. *The Internet Journal Of Surgery.* 2012;28(2).
- [5]. Basrur GB, Naik RP, Doctor NH. Primary presentation of abdominal tuberculosis in an inguinal hernia. *Indian Journal of Surgery.* 2006;68(3):174.
- [6]. Nicolo Enrico. Unexpected findings in inguinal hernia surgery. In: Bendavid Robert, Abrahamson Jack, Arrequi ME, Flament JB, Phillips EH, editors. *Abdominal Wall Hernias: Principles and Management.* New York: Springer-Verlag; 2001. p.184-191.

Dr. Talib Hussain. "Inguinal Hernia Sac Tuberculosis-A Rare Presentation of Abdominal Tuberculosis: Case Report and Review of Literature." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, vol. 18, no. 11, 2019, pp 17-18.