



Isolated Tuberculosis of Gall Bladder : A Case Report

KEYWORDS

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ABSTRACT

Isolated tuberculous infection of gall bladder is very rarely seen. Most of these cases reported in the literature are within 30 – 40 years of age group, especially in females. However we report here a case of isolated tuberculosis of gall bladder in a relatively younger female of age 22 years. Most of these patients present with symptoms of cholelithiasis and hence it is prudent to subject the operative specimen of excised gall bladder for histopathological examination to get proper diagnosis.

INTRODUCTION:

Historically, isolated tuberculosis of gall bladder was reported for the first time in 1870 by Gaucher [1]. Later Gergahl reported 41 cases of isolated tuberculous infection of gall bladder which was an uncommon entity, even in areas having high endemicity of tuberculosis [1]. Till 2003 only 50 cases of naneisolated tuberculous infection of gall bladder were reported in literature [2].

CASE REPORT :

- A 22 years old female patient presented with complaints of dyspepsia & right upper abdominal pain on & off for last 1 year, associated with occasional vomiting, especially after meals. There was no history of blood or mucous in stools. There was no history of loss of weight or evening rise of temperature. The examination of abdomen revealed slight tenderness in right hypochondrium but no palpable abdominal lump.
- The haematological & liver function tests were within normal limits. Ultrasonography of the abdomen showed multiple calculi in the gall bladder, the largest measuring 13 mm, no thickening gall bladder wall and non dilated common bile duct.
- In view of the symptomatic cholelithiasis, patient was posted for laparoscopic cholecystectomy. Intraoperatively the gall bladder was fibrotic & shrunken, with dense adhesion surrounding, because of which the laparoscopic procedure could not be attempted further & the case was converted to open cholecystectomy. On opening abdomen, the gall bladder was found out to be intrahepatic, with a large calculus at the neck of the gall bladder, along with multiple small calculi. There was no free fluid or evidence of tubercles in peritoneal cavity. Cholecystectomy was performed, which required a difficult dissection due to dense adhesion. The excised specimen was sent for histopathological examination, which showed a chronically inflamed gall bladder with non caseating granulomas, suggestive of a tuberculous infection of gall bladder. The post operative course was uneventful, anti tuberculous drug therapy was started and eventually patient made a good recovery.

DISCUSSION:

Isolated gall bladder tuberculosis generally occurs in women over 30 years old. The usual presentation is vague right upper abdominal pain, weight loss, fever, nausea, vomiting & diarrhea. Very rarely, there is a palpable abdominal lump [3]. Our patient was a relatively younger 22 year old female with chronic right upper abdominal pain, consistent with usual presentation of other cases.

Gall bladder is very resistant to acquire a tuberculous infection, due to its thick wall & highly alkaline nature of bile, which inhibits the growth of mycobacterium [4],[5],[6].

Walter failed to produce the characteristic lesion in gall bladder by inoculation of tuberculous bacilli, except in cases with a previous lesion of the organ or ligation of choledochal duct. The role of extracellular PH on immune function is a well established fact & gall bladder tuberculosis is uncommon in an acidic environment which has got a compromised macrophage, lymphocyte & natural killer cell function [5].

It is postulated that the cystic duct obstruction leads to the disappearance of bile acid from gall bladder, which further decreases the natural innate resistance to mycobacteria .

Gall stones cause damage to the gall bladder wall which seems to be the risk factor for development of cholecystitis. Most of the cases (70 %) of isolated tuberculous infection of gall bladder reported in literature have associated gall stones [6], as in our patient who also had multiple gall stones largest measuring 13 mm.

CONCLUSION :

It is not possible to correctly diagnose isolated tuberculosis of gall bladder from clinical features mimicking cholelithiasis or carcinoma of gall bladder & from available serological and imaging techniques. Isolated organ tuberculosis may appear in any tissue seeded haematogenously and may be the presenting manifestation of tuberculosis, which seems to be the most plausible explanation of isolated tuberculosis of gall bladder. Hence all the cholecystectomy specimens must be subjected to the histopathological examination, to rule out the possibility of isolated tuberculosis of gall bladder, to detect and properly manage this very rare surgical entity.

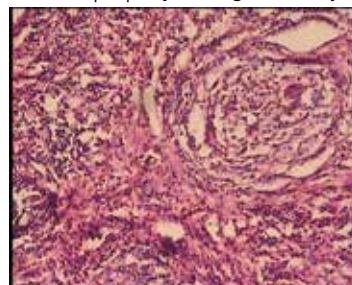


Figure 1- Microscopic appearance of tuberculous gall bladder.

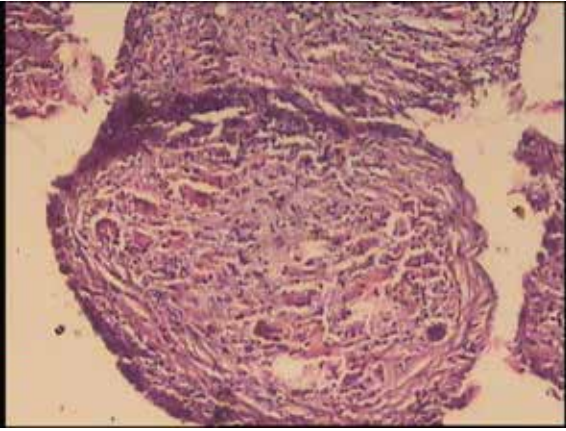


Figure 2 - Microscopic appearance of tuberculous gall bladder.

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