Eosinophilic Cholecystitis: A Case Report

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Citation

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Abstract

Eosinophilic cholecystitis is a rare entity whose etiology is obscured. They neither have any specific clinical manifestation nor have any laboratory features. The diagnosis is based on histopathology of cholecystectomy specimens. We report a case of Eosinophilic cholecystitis, diagnosed on histopathology of a patient presenting with acalculous cholecystitis with choledocholithiasis and cholecystoduodenal fistula.

INTRODUCTION

Eosinophilic infiltration of gall bladder wall on histopathology is a rare entity. Cellular infiltrate comprising of 90% eosinophils is classified as eosinophilic cholecystitis. When the infiltrate comprises 50-75% eosinophils along with other inflammatory cells in the gall bladder wall, they are termed lympho-eosinophilic cholecystitis. [1,2,3]

CASE REPORT

A 55-year female was admitted with history of pain in the right upper abdomen since last 1-year. There was history of jaundice since last 15 days. As per patient's attendant, patient was subjected to open cholecystectomy for suspected cholecystitis at a private hospital 7 days back, where the local surgeon had suspected a growth on exploration and had abandoned the procedure. The patient was referred to our hospital for further management.

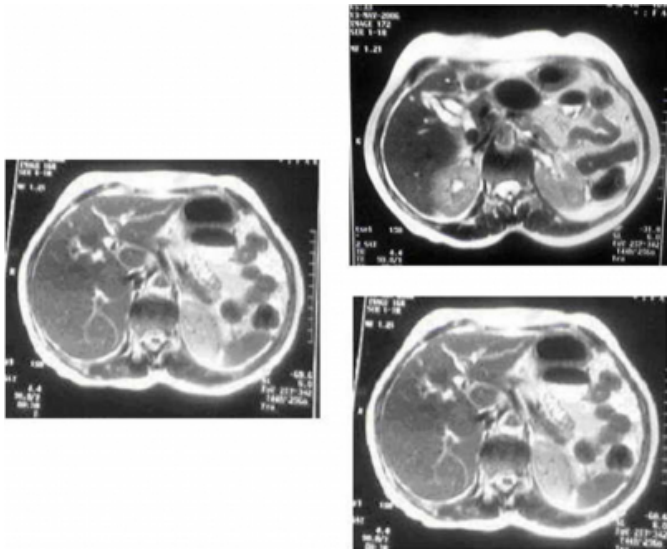
At the time of admission, the patient's vital parameters were normal. Mild icterus was detected and there was a sutured right subcostal wound.

Investigation revealed Haemoglobin- 10.3gm/dl, Differential Leukocyte count – Neutrophils – 70, Lymphocytes –18 and Eosinophils - 12. Absolute Eosinophil count was 276 / cu.mm. Liver function tests showed Total Bilirubin – 4.6 mg/dl with Direct Bilirubin – 2.7 mg/dl, Alanine transminase – 42 IU/L, Aspartate transminase –46 IU/L and Alkaline Phosphatase - 655 IU/L.

The patient was subjected to MRI abdomen, which showed a contracted gall bladder, choledocholithiasis with proximal dilatation of common bile duct and central prominence of intrahepatic biliary radicals dilatation. (Fig-1)

Figure 1

Figure 1: MRI abdomen showing contracted gall bladder, choledocholithiasis with proximal dilatation of common bile duct and central prominence of intrahepatic biliary radicals dilatation.



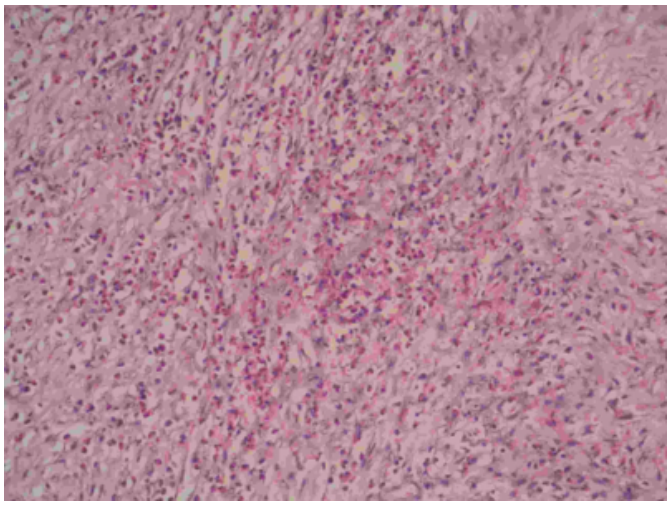
On exploratory laparotomy a contracted thickened gall bladder with cholecystoduodenal fistula and stone in the common bile duct was found. Cholecystectomy with Choledocholithotomy and primary repair of the duodenal defect was done followed by a stamm's gastrostomy, feeding jejunostomy and T-tube placement in the CBD. Feeding was commenced via the feeding jejunostomy from 5th post-operative day onwards. Post-operatively the right sub hepatic drain showed a mild biliary leakage from 6th day onwards. T-tube cholangiogram revealed a minor leakage of dye from the cystic duct stump. The patient was managed

conservatively and the subsequent post-operative recovery was uneventful. The tube gastrostomy, feeding jejunostomy tube and T-tube were removed after the oral intake was adequate.

Histopathology revealed an ulcerated gall bladder mucosa, granulation tissue and lymphoplasmocytic infiltrate with marked increase in number of eosinophils, suggesting eosinophilic cholecystitis.(Fig-2)

Figure 2

Figure 2: Histopathology of Gall Bladder revealing lymphoplasmocytic infiltration with marked increase in number of eosinophils, suggesting eosinophilic cholecystitis



DISCUSSION

Eosinophilic cholecystitis is prevalent in 0.25% - 6.4% of all cholecystitis. [1,4,5]The average age of presentation is around 37 years. [6]

The etiology of eosinophilic cholecystitis is still obscure and local eosinophilic inflammatory reaction to gall stones or parasites has been postulated. [7]Eosinophilic cholecystitis is reported with rupture of hepatic hydatid cyst into the bile ducts. [8]Clonorchis sinensis infestation in the common bile duct and Ascariasis of the biliary tract are also implicated in the pathogenesis of the disease. [9,13]

Calculi are associated in 40% of cases with both eosinophilic and lympho-eosinophilic varieties are commonly associated with acalculous cholecystitis. [4,6]Literatures have also reported acalculous eosinophilic cholecystitis with obstructive jaundice, commonly in males.[2]

Eosinophilic cholecystitis has also been reported with systemic hypereosinophilic syndromes. [14]It is also observed as a part of eosinophilic gastroenteritis where there is diffuse eosinophilic infiltration of the gastrointestinal tract. [2]

Drugs such as cephalosporins, erythromycin and a few herbal medicines have also been attributed to the pathogenesis of this disease. [6,10,11]

It is also reported as a late complication of eosinophilia-myalgia syndrome. [12]

There is no specific clinical manifestation of this disease apart from cholecystitis, with histopathology being the sole basis behind the diagnosis. Laboratory investigation reveals peripheral eosinophilia in eosinophilic cholecystitis associated with systemic hypereosinophilic disorders. [14]

The definitive treatment of eosinophilic cholecystitis is cholecystectomy. However steroids may be used as an adjuvant in eosinophilic cholecystitis associated with eosinophilic gastroenteritis. [2]

CONCLUSION

Eosinophilic cholecystitis is a rare entity and encountered in cholecystectomy specimens. The etiology is obscure and is implicated with various local and systemic eosinophilic inflammatory reactions. Cholecystectomy is the definitive treatment of this rare disease.

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