Case Report

Eosinophilic cholecystitis - A case report

Saswade Kalpesh[1*], S Opendro Singh[2], Th. Sudhir Chandra Singh[3], Chetan Maibam[4], Manu Maheendran[1], Guruprasad N[1]

[1]PGT, [2]Associate Professor, [3]Professor, [4]Assistant Professor, Department of Surgery, Regional Institute of Medical Sciences, Imphal, Manipur, INDIA.
Email: drkalpeshsaswade@gmail.com

Abstract

Eosinophilic cholecystitis (EC) is a rare entity. It was first described in 1960. The diagnosis is based on symptoms of cholecystitis with the presence of more than 90% eosinophilic infiltration within the wall of gallbladder. The etiology of EC still remains unknown. EC can occur alone or in combination with hypereosinophilic syndromes and parasitic infestations. This report describes a case of EC who presented with malena and obstructive jaundice. After thorough workup patient underwent open cholecystectomy with CBD exploration and truncal vegotomy with pyloroplasty for choledocholithiasis and multiple gastric ulcer. Histopathological study showed Eosinophilic cholecystitis. We are reporting this case because of its rarity and to emphasize the need of complete work up to rule out associated diseases.
Keywords: eosinophilic cholecystitis, cholelithiasis, choledocholithiasis.

[*]**Address for Correspondence:**
Dr. Saswade Kalpesh, PG Student, Department of Surgery, Regional Institute of Medical Sciences, Imphal, Manipur, INDIA.
Email: drkalpeshsaswade@gmail.com
Received Date: 18/04/2016 Revised Date: 30/05/2016 Accepted Date: 15/06/2016

Access this article online

Quick Response Code:

Website: www.statperson.com

DOI: 05 September 2016

INTRODUCTION

Eosinophilic cholecystitis (EC) is a rare condition which presents similar to that of typical cholecystitis with right hypochondriac pain, nausea, vomiting, fever. It is post-operative diagnosis when histopathological report shows eosinophilic infiltration of gall bladder wall with more than 90% eosinophils. Eosinophilic cholecystitis can cause eosinophilic infiltration of other organs, such as the GIT and liver [3]. The incidence of eosinophilic cholecystitis is very low in India. In the study of morphological spectrum of gall stone disease in 1100 cholecystectomies in North India by Mohan H *et al* demonstrated only 6 cases of EC in their study[4]. The etiology of EC is unknown, but allergies, gallstones, parasites, Hyper Eos inophilic Syndrome (HES) and Eosinophilic Gastro-Enteritis (EGE) may play a role[5-10].

CASE REPORT

65 year old male patient came with complains of malena, jaundice and anemiasince 15 days and pain in right upper quadrant since 7 days. There was no significant past history of medical or surgical jaundice. No any history of allergies or parasitic infestation. In the view of clinical history and examination finding patient was provisionally diagnosed and worked up as Periampullary Carcinoma. His investigation showed Hb-7.8gm/dl, TLC-7600, Neutrophils-59, Lymphocytes-32, Eosinophils-04, Monocytes-05, Sr. Bilirubin-12.7mg%, ALP-307 IU, GGT-660 IU. Stool routine examination did not show any evidence of parasitic ova or cyst. Patient underwent CECT abdomen and MRI showing cholelithiasis with choledocholithiasis and pancreas was normal. Patient was evaluated for recurrentmalena with Upper GI Endoscopy which showed multiple gastric ulcer. Patient then underwent Open Cholecystectomy and CBD Exploration with Truncal Vagotomy and Pyloroplasty. Intraoperative and Postoperative period was uneventfull. Postoperative histopathology report showed Eosinophilic Cholecystitis with eosinoplilic infiltration of gall bladder wall.

How to site this article: Saswade Kalpesh *et al.* Eosinophilic cholecystitis - A case report. *International Journal of Recent Trends in Science and Technology*. September 2016; 20(2): 191-192. http://www.statperson.com (accessed 07 September 2016).

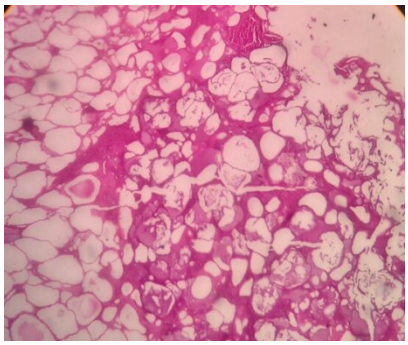

Figure 1: Histopathological slide of patient showing eosinophilic infiltration of gall bladder wall

DISCUSSION

In cholecystitis, gallstone impaction in the neck of the gallbladder or cystic duct initiates inflammatory process. Lymphocytes, macrophages, and neutrophilsinfiltrates gall bladder wall. When the infiltrate is formed by large number of eosinophils along with signs of inflammation, granulation tissue, and fibroblast propagation, it is known as Eosinophilic Cholecystitis. Eosinophilic infiltration of the GIT may occur not only as EC, HES or EGE, but also as eosinophilic granulomatous hepatitis and eosinophilic ascites Dabbs *et al*[5] reviewed 217 cases of cholecystectomy specimen and stated that eosinophilic infiltrate is three times more common in acalculous cholecystitis. In contrast, in our case, patient had cholelithiasis.In acalculous cholecystitis leading to eosinophilic cholecystitis, there is invasion of the mucosal surface by eosinophils. Causes of acute acalculous cholecystitis include herbal medicine, critical illness, decreased motility of the gastrointestinal tract, major burns and connective tissue diseases such as polyarteritisnodosa, lupus erythematosus, Crohn's disease, sarcoidosis, and Sjogren's syndrome[11]. In a series by Fox and Mainwaring 16 of 625 of cholecystectomy specimen showed eosinophilic infiltration.3 of the 16 had pure eosinophilic infiltration. A study by Muhlberger revealed 55 of 660 resected gallbladders (8.3%) that had ≥25% eosinophilic infiltration[12,13]. 15 cases of EC were reported from Korea aged between 17-58 yr, with idiopathic etiology in most of the cases. Two cases were due to parasitic infestation, one with Ecchinococcus and the other due to Clonorchissinensis[14,15]. Peripheral eosinophilia was present in 4 of the 15 cases. When peripheral eosinophilia is present, the EC can be a manifestation of HES. In our case,patient did not had peripheral eosinophilia or parasitic infestation. The presentation of eosinophilic cholecystitis is non-specific and rare, hence histopathological examination is mainstay for diagnosis. The underlying etiology should be searched because if discovered, simple cholecystectomy may not be sufficient.

REFERENCES

1. Dabbs DJ. Eosinophilic and lyrnphoeosinophiliccholecystitis. Am J Surg Pathol. 13; 17:497-501. [PubMed]
2. Albam G, Poilleux, Olivier c, Libaude H, Cascarigny P. Les cholecystites a eosinophils. Presse Med. 1949; 39:558-9.
3. Sanchez-Pobre P, Lopez-Rios MF, Colina F, Yela C, Manzano M, Rodriguez S, Martin A, Casis B, Garfia C, Castellano G, Solis - Herruzo JA. Eosinophilic cholecystitis: An infrequent cause of cholecystectomy. GastroenterolHepatol.1997; 20:21-3. [PubMed]
4. Mohan H, Punia RP, Dhawan SB, Ahal S, Sekhon MS. Morphological Spectrum of gall stone disease in 1100 cholecystectomies in North India. Indian J Surg. 2005; 67:140-2.
5. Russel COH, Dowling JP, Marshall RD. Acute eosinophilic cholecystitis in association with hepatic echinococcosis. Gastroenterology 1979; 77:758-760.
6. Rosengart TK, Rotterdam H, Ranson JHC. Eosinophilic cholangitis: a self-limited cause of extrahepatic biliary obstruction. Am J Gastroenterol 1990; 85:582-585.
7. Adusumilli PS, Lee B, Parekh K, Farrelly P. Acalculous eosinophilic cholecystitis from herbal medicine: a review of adverse effects of herbal medicine in surgical patients. Surgery 2002; 131:352-356.
8. Tenner S, Roston A, Lichtenstein D, Brooks D, Herlihy E, Carr-Locke D. Eosinophilic cholangiopathy. GastrointestEndosc 1997; 45:307-309.
9. Al-Abdulla NA, Schulick RD, Regan F. Hypereosinophilicsclerosing cholangitis: findings using halfFourier magnetic resonance imaging. Hepatogastroenterology 2000; 47:359-361.
10. Hepburn A, Coady A, Livingstone J, Pandit N. Eosinophilic cholecystitis as a possible late manifestation of the eosinophilia-myalgia syndrome. Clinical Rheumatology 2000; 19:470-472.
11. Parry SW, Pelias ME, Browder W. Acalculous hypersensitivity cholecystitis: hypothesis of a new clinicopathologic entity. Surgery 1988; 911-916.
12. Fox H, Mainwaring AR. Eosinophilic infiltration of the gallbladder. Gastroenterology 1972; 63:1049-1052.
13. Muhlberger VF. ZurMorphologie der eosinophilen cholecystitis und die frageihrerallergischengenese. Int Arch Allergy 1954; 5:434-448.
14. Kim YH. Eosinophilic cholecystitis in association with Clonorchissinensis infestation in the common bile duct.ClinRadiol 1999; 54:552-554.
15. Russel COH, Dowling JP, Marshall RD. Acute eosinophilic cholecystitis in association with hepatic echinococcosis. Gastroenterology 1979; 77:758-760.

Source of Support: None Declared
Conflict of Interest: None Declared