

## EOSINOPHILIC CHOLECYSTITIS: An infrequent cause of cholecystectomy

Kamran Ahmad Malik

### ABSTRACT

Eosinophilic cholecystitis is a rare condition with obscure etiology. They are diagnosed histopathologically on resected specimens. We report a similar case confirmed on histopathology of a 49 years old diabetic lady who underwent routine elective cholecystectomy for chronic cholecystitis due to gall stones. The rarity of the condition prompted us to report this entity.

**KEY WORD:** Eosinophilic Cholecystitis.

Pak J Med Sci July - September 2010 Vol. 26 No. 3 724-725

### How to cite this article:

Malik KA. Eosinophilic cholecystitis: An infrequent cause of cholecystectomy. Pak J Med Sci 2010;26(3):724-725

### INTRODUCTION

The Eosinophilic cholecystitis is a rare form of cholecystitis in which the eosinophils form the dominant component of inflammatory cells in the wall of the gall bladder so much so that their presence clearly overshadows the presence of any other inflammatory cell component. It is prevalent in 0.25-6.4% of all cholecystitis.<sup>1</sup> Usually it's an acalculous cholecystitis but in rare cases it's seen with gall bladder stones. It may be idiopathic or it may be associated with other disease conditions.

Rarity of the condition prompted us to report a case of eosinophilic cholecystitis along with review of literature that occurred in a diabetic

lady who underwent elective cholecystectomy. The diagnosis was made by the histopathological findings.

### CASE REPORT

Forty nine (49) years old diabetic lady controlled on tablet glucophage 500mg twice daily presented to us in surgical out patient clinic with six months history of on and off right hypochondrial pain radiating to her back with no other associated symptoms. There was no relation to food intake and no aggravating or relieving factors. There was no history of jaundice or fever. There was no past history for allergies for any thing. Clinically she was stable with soft and non tender abdomen. Murphy's sign was positive for her. She was confirmed on ultrasonography to have 2cm gall stone with no features of acute cholecystitis. Her routine blood investigations were within normal limits with absolute eosinophil count in peripheral blood was  $0.2 \times 10^9/L$ .

She underwent routine elective laparoscopic cholecystectomy under general anesthesia. Per operatively thick walled distended gall bladder with omental adhesions was noted. Grossly the anatomy was normal. She had an uneventful

---

1. Dr. Kamran Ahmad Malik, FCPS, FRCS,  
Senior Registrar, Dept. of Surgery,  
Sultan Qaboos University Hospital,  
Muscat, Oman.

Correspondence:

Dr. Kamran Ahmad Malik,  
Senior Registrar, Department of Surgery,  
Sultan Qaboos University Hospital,  
PO box 38, PC 123, Muscat,  
Sultanate of Oman.  
E-mail: surgeonkamran@yahoo.com

\* Received for Publication: April 1, 2010

\* Accepted: June 14, 2010

recovery and was discharged on oral analgesics and anti diabetic medications next day. The biopsy report confirmed dense transmural eosinophilic infiltrate with gall bladder wall lined partially by hyper plastic mucosa and partially by necrotic and ulcerated mucosa. There was mild hypertrophy of fibro muscular layer with chronic inflammation (Figure-1). Histopathologically all these features were concordant with eosinophilic cholecystitis.

## DISCUSSION

Eosinophilic cholecystitis is an infrequent and poorly understood inflammatory condition of the gall bladder. It was first described in French literature in 1949 by Albot et al,<sup>2</sup> ever since then it is being infrequently reported. It is more common than previously recognized and probably represents a subgroup of patients with a unique or hypersensitivity type of inflammatory response to altered bile. They neither have any specific clinical manifestation nor any specific laboratory features. Peripheral eosinophilia may be seen in cases associated with systemic hypereosinophilic disorders, there was no peripheral eosinophilia in our patient. It can't be clinically distinguished from ordinary cholecystitis before surgery and it invariably leads to cholecystectomy.

Etiology remains obscure. Commonly seen as acalculous cholecystitis, calculi are present in 40% of cases. It has been hypothesized as local eosinophilic inflammatory reaction to gall stones, as seen in our patient, or parasites as its likely cause. It has been reported alone or in combination with manifestations such as eosinophilic cholangitis, hypereosinophilic syndromes and parasitic infestations like clonorchis sinensis and ascariasis.<sup>3</sup> Certain drugs such as erythromycin, cephalosporins and few herbal medications have also been attributed to the pathogenesis. It is also reported as late complication of eosinophilia-myalgia syndrome.<sup>4</sup> It is classified according to cellular infiltrate in the wall of the gall bladder as eosinophilic cholecystitis if comprising 90% eosinophils and lympho-eosinophilic cholecystitis if the infiltrate comprises only 50-75% eosinophils along with other inflammatory cells.<sup>5</sup>

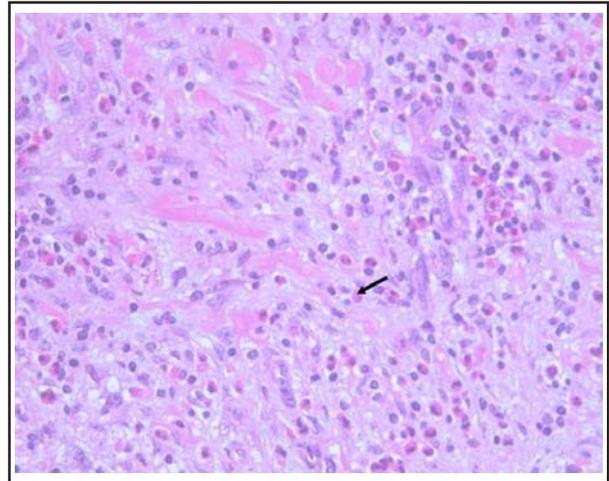


Figure-1: Histopathology of gall bladder revealing marked increase in the number of eosinophils, (black arrow)

Cholecystectomy appeared to be definitive treatment for the eosinophilic cholecystitis and good results were obtained in majority of the cases. In two cases of eosinophilic cholecystitis with eosinophilic cholangitis, one was effectively cured with steroids and second was effectively treated with the help of antibiotics.<sup>6</sup>

## CONCLUSION

Eosinophilic cholecystitis is a rare entity with obscure etiology which is diagnosed histopathologically on resected specimens of gall bladder. Cholecystectomy remains the definitive treatment of this rare disease.

## REFERENCES

1. Sahu S, Srivastava P, Chauhan N, Kishore S, Kumar P, Bahl DV. Eosinophilic Cholecystitis: A case Report. *The Internet J Surgery* 2007;9:1.
2. Albot G, Poilleux H, Oliver C. Les Cholécystites a éosinophils. *Presse Med* 1949;57:558-559.
3. Shah OJ, Shah P. Ascariasis induced eosinophilic cholecystitis. *HPB (J Int. Hepato-Biliary Association)* 2006;8(1):72-73.
4. Hepburn A, Coady A, Livingstone J, Pandit N. Eosinophilic cholecystitis as a possible late manifestation of the eosinophilia-myalgia syndrome. *Clin Rheumatol* 2000;19(6):470-472.
5. Punia RP, Arya S, Jain P, Bal A, Mohan H. Eosinophilic and lympho-eosinophilic cholecystitis. *Indian J Gastroenterol* 2003;22(4):153-154.
6. Kim YH. Eosinophilic cholecystitis in association with *Clonorchis Sinensis* infestation in the common bile duct. *Clinical Radiology* 1999;54(8):552-554.