Original Research Paper



General Surgery

GIANT GALLSTONE: A RARE INDICATION OF OPEN CHOLECYSTECTOMY

Dr Ganpat Singh chaudhary	Department of general Surgery, Dr SN Medical College Jodhpur Rajasthan
Dr Lalit Kishore*	Assistant Professor, Department of general Surgery, Dr SN Medical College Jodhpur Rajasthan *Corresponding Author
Dr Pooja Guru	Department of Pathology, Dr SN Medical College Jodhpur Rajasthan
Dr Suresh Kumar Rulaniya	Department Of Urology, SCB Medical Collage & hospital, Cuttack

Gallstones are the most common biliary pathology. Gallstone disease is more common in western world than Asia with females being more commonly affected than men. Gallstones can be as small as sand or as large as a golf ball. Giant Gallstones with a diameter of over five cm are rare. We present a case of gallstone of size 60 x 40 mm which weighed 74 grams.

KEYWORDS: Gallstones, Cholelithiasis, Cholecystectomy.

INTRODUCTION

Gallstones are the most common biliary pathology. The gall bladder may contain a single large stone or many smaller ones. Although the causative factors relating to the development of gallstones are multiple, environmental and genetic. About 10% of population have gall stones, but the vast majority experience no symptoms and needs no treatment. Complications from gallstones are the second most common reason for hospital admission, and are associated with a high mortality.[1]

Laparoscopic cholecystectomy is the gold standard treatment for gall stone disease but very large gall stone may require open cholecystectomy. We encountered a rare case of giant gallstone (> 5 cm) which was successfully managed by open cholecystectomy.

CASE REPORT

58 year female was admitted to our department with complaints of right hypochondric pain and post prandial epigastric fullness. She gave history of intermittent right upper quadrant pain after meals for the last six months associated with nausea and post prandial fullness. Patient was afebrile per abdomen soft nontender. Routine laboratory investigations were normal except for mild leucocytosis. Other blood tests (blood glucose, electrolytes, RFT,LFT, coagulation profile) were normal. Abdomen ultrasonography revealed a thickened gall bladder wall and a single giant gallstone of size approximately 68 x 40 mm. No abnormality was detected in biliary tract, and there was no intra-abdominal collection of fluid. After proper anesthesia workup and informed written consent patient was planned for lap cholecystectomy.

After placement of camera and epigastric port we found that gall bladder is small intrahepatic and contracted with frozen calot's triangle and dense adhesion present between gall bladder, stomach and duodenum. 3 rd and 4 th port are placed and we found that we are unable to hold fundus and body of gallbladder with gallbladder grasper forcep because large gall stone is impacted at fundus. Then plan was to convert in open cholecystectomy through right mini sub costal incision. On surgical exploration, the stone filled the gall bladder an was difficult to manipulate. First a fundal incision was given to remove the stone from gall bladder and a standard cholecystectomy was performed. Thereafter, we found a single gall stone of size 60x34 mm [Fig.1]. Post operative period was uneventful. On the fourth postoperative day, the patient was discharged from the hospital in stable condition. Histopathological examination revealed chronic cholecystitis with cholelithiasis. The stone was predominantly black in colour, containing dark green pigmented areas, with a smooth surface and hard in consistency.



FIG 1: Photograph showing giant gall stone

DISCUSSION

Gallstone disease is a very common clinical condition. Gallstone disease is more common in western world than Asia with females being more commonly affected than men [2]. The etiology of gallstone is probably a combination of defect in lipid metabolism and supersaturation of bile contents, especially cholesterol. It is rare in the first two decades. Incidence gradually increases after 21 years and it reaches the peak in the fifth and sixth decades. Women are affected more often than men in the ratio of 4:1. This gender difference may be due to the fact that estrogen increases the concentration of cholesterol in bile, leading to an excess of cholesterol and slowed gall bladder movements.[3]

Gallstone disease remains one of the most common medical problems leading to surgical intervention. Some patients may remain asymptomatic, while some progress to a symptomatic stage [4]. The gall bladder may contain a single large stone or many smaller ones. Gallstones can be as small as sand or as large as a golf ball. But gallstones with a diameter of over five cm are very rare. We present a case of gallstone of size 60x40 mm and weighed 74 grams.

Laparoscopic cholecystectomy is the gold standard treatment for symptomatic gall stones presently. But laparoscopic cholecystectomy can be difficult procedure in presence of giant gall stone like the one we encountered. Large gallstones would result in more severe inflammation , thickening of the gallbladder wall and the large gallstone would make it difficult to grasp the gallbladder with the laparoscopic instruments and expose the anatomy of frozen Calots triangle. Difficulty will also occur in the retrieval of such a large gallstone. Because of these reasons, open cholecystectomy may be preferred in such cases.

CONCLUSION

Giant gallstone of size more than 5 cm in diameter is very rare, we present a case of giant gallstone measuring 60×40 mm. Open cholecystectomy may be the procedure of choice in such cases instead

of laparoscopic cholecystectomy.

REFERENCES

- EFERENCES

 Covarrubias C, Valdivieso V, Nervi F. Epidemiology of gallstone disease in Chile.In:
 Capocaccia L, et al., editors. Epidemiology and prevention of gallstone disease.
 Lancaster, England: MTP; 1984. p. 26–30.

 Lammert F, Sauerbruch T. Mechanisms of disease: the genetic epidemiology of gall bladder stones. Nat Clin Pract Gastroenterol Hepatol. 2005;2(9):423-433.

 Jorgensen T. Gall stones in a Danish population. Relation to weight, physical activity, smoking.coffee consumption and diabetes mellitus. Gut. 1989;30:528-534.

 Ahrendt SA, Pitt HA. Biliary tract. In: Townsend MC (ed). Sabiston textbook of surgery. Philadelphia: Elsevier-Saunders; 2004, 1597-1641.