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Research Article

**CLINICAL EVALUATION OF PATIENTS WITH
CHOLELITHIASIS**¹ Dr. Hamid Raza, ² Dr. Khurram Abbas, ² Dr. Arshad Hussain Abro,
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Jamshoro³ Liaquat University Hospital Hyderabad / Jamshoro⁴ General Practitioner Zulekha Hospital Dubai United Arab Emirates**ABSTRACT:****OBJECTIVE:** To evaluate the clinical profile of patients with cholelithiasis**PATIENTS AND METHODS:** The cross sectional study of six months was conducted at tertiary care hospital, all the patients of ≥ 30 year of age, either gender diagnosed as cholelithiasis recruited and enrolled in the study and explore for their demographical and clinical profile at tertiary care hospital. The frequency (percentage) and mean \pm SD was calculated for qualitative and quantitative variables in patients with diabetic foot ulcer.**RESULTS:** Total fifty patients were admitted studied with the history of Cholelithiasis. The mean \pm SD for age (yrs) and duration of disease (wks) was 51.76 ± 4.86 and 6.82 ± 2.85 with female gender predominance (80%). The clinical features observed were fever 36%, nausea / vomiting 44%, jaundice 20%, abdominal pain 90% and dyspepsia 24% while the ultrasound findings were single stone 10%, multiple stone 30%, bile duct stones 10%, thickening of gallbladder 36%, dilated bile duct 14% whereas regarding the intervention laparoscopic cholecystectomy 70% and open cholecystectomy 30%. Regarding the type of stone cholesterol stone 14%, mixed 46% and pigmented 10% and majority of the patients belonged to rural population 75%.**CONCLUSION:** The gallstones incidence commonly identified during fifth and sixth decades with female predominance, the common symptoms presented were pain and tenderness at right hypochondrium while the sonography is the best screening investigation**KEYWORDS:** Gallstones, cholelithiasis and cholecystectomy.**Corresponding author:***** Dr Hamid Raza,**

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INTRODUCTION:

The prevalence of gallbladder stone varies widely in different parts of the world and in Pakistan its prevalence increasing, a former study limited to rail road workers shown that seven times increasing prevalence of gall stone [1]. In USA the autopsy series had shown cholelithiasis in at least 20% of females and 8% of males over the age of 40 year [2]. It is observed that at least twenty million populations in USA had gallstones & approximately one million new patients of gallstone developed annually. The prevalence in western society is 19%, Ireland 6% & Sweden 40%. In Australia the prevalence ranges from 15% to 30% while in Africa it is less than 1% and in Japan it is increasing from 3% to 8% respectively [3, 4]. The diagnosis of cholelithiasis is by complete relevant history & specific physical examination & along with other investigations certain relevant investigation differs from patient profile, clinical profile and the requirement for surgical skills and interventions of surgeon. It is mainly attributed to western society & facilities for biochemical tests include sonography for population belonged to urban or rural areas & affordability should also kept in mind due to alternation in socio-economic profile & burden of investigations. Due to increase in prevalence of cholelithiasis & its different spectrum in Pakistan there is a dire need to conduct a study that can provide information related to the prevalence of the disorder, different spectrum of presentation, management and outcome of individuals with gallstones.

PATIENTS AND METHODS:

The cross sectional study of six months was conducted at tertiary care hospital, all the patients of ≥ 30 year of age, either gender diagnosed as cholelithiasis recruited and enrolled in the study. The details history was taken, relevant physical examination was performed and specific

investigations were advised. All the risk and benefits were explained to the patient in terms of surgery, consent was taken and the pre operative management plans were also initialized. During surgery the anatomical variations were observed, the bile was gained from bladder by a syringe and sent for culture and sensitivity. Based on operative criteria and findings, the exploration of common bile duct was done. Some of the individuals underwent for open cholecystectomy and some laparoscopic cholecystectomy depends on clinical circumstances. The sub-hepatic tube drain was placed and connected to bag while the abdomen was closed whereas the gallstones were sent to laboratory for examination. The post operative care was planned according to the guidelines and also monitor daily for occurrence of any complication and appropriate treatment was given if needed and the antibiotic selection was made according to the results of C/S. Individuals underwent laparoscopic cholecystectomy were discharged on 3rd day of surgery & open cholecystectomy were discharged on seventh day. Unless any complications. Patients were advised regarding diet, rest and to visit the surgical OPD for regular follow up. Patients were advised for diet, rest & visit to surgical OPD while the follow-up sessions were categorized as improvement in symptoms and examination of wound and scar. The data of all patients were saved on proforma and manipulate in SPSS for the calculation of frequencies, percentages and mean \pm SD.

RESULTS:

Total fifty patients were admitted studied with the history of cholelithiasis. The mean \pm SD for age (yrs) and duration of disease (wks) was 51.76 ± 4.86 and 6.82 ± 2.85 and majority of the patients belonged to rural population 75%. The results are presented in Table 01.

TABLE 1: THE DEMOGRAPHICAL & CLINICAL PROFILE OF STUDY POPULATION

Parameter	Frequency (N=50)	Percentage (%)
Age (yrs)		
30-39	12	24
40-49	20	40
50+	18	36
Gender		
Male	10	20
Female	40	80
Clinical presentation (hrs)		
Fever	18	36
Nausea / Vomiting	22	44
Jaundice	10	20
Abdominal Pain	45	90
Dyspepsia	12	24
Ultrasound findings:		
Single stone	05	10
Multiple stone	15	30
Bile duct stones	05	10
Thickening of gallbladder	18	36
Dilated bile duct	07	14
Intervention		
Laparoscopic cholecystectomy	35	70
Open cholecystectomy	15	30
Type of stone		
Cholesterol stone	07	14
Mixed	38	46
Pigmented	05	10

DISCUSSION:

Gall stones were first time described by Langen buch in late 19th century and presented the understanding of cholelithiasis and had first successful cholecystectomy [8]. Greek physician Alexander Trallianus described the stone within the bile ducts. Vesalius and Fallopius identified the gallstones in the

gall bladder during the dissection of human bodies. In present study total fifty patients with gallstones that were studied with mean \pm SD for age (yrs) and duration of disease (wks) were 51.76 ± 4.86 and 6.82 ± 2.85 (wks). The similar prevalence in terms of age and duration of disease was detected by Nakeeb A, et al and Chen CY, et al [9, 10]. In current series

the females were 40 (80%) and male 10 (20%) and is consistent with the former studies [11, 12]. In current series study 15 (30%) individuals underwent for open cholecystectomy and 35 (70%) cases underwent laparoscopic cholecystectomy and the conversion rate from lap to open cholecystectomy was 6% and is related to the former studies [13, 14].

In current study all the patients had ultrasound scan and the findings are consistent with the study by Muller MF, et al [15]. In current series the wound infection was most common complication and occupies 6% while it is 6.3% in the study by Grande M, et al [16] while the clinical features of present study are also correlated with the former studies [17, 18]. In current series majority 46% had mixed stones & 14% had cholesterol stone, 10% had pigment stone and is consistent to the study by Qiao T, et al [19] while the culture and sensitivity findings of present study are also consistent with the study by Swidsinski A, et al [20] whereas there was no trouble in follow up time period in any case and nothing more can be stated due to limited follow up period for the study population.

CONCLUSION:

The gallstones incidence commonly identified during fifth and sixth decades with female predominance, the common symptoms presented were pain and tenderness at right hypochondrium while the sonography is the best screening investigation whereas the commonest type of stone was mixed stones. The reduced rate of complications and hospital stay was commonly observed in laparoscopic cholecystectomy.

REFERENCES:

1. Njeze GE. Gallstones. Niger J Surg. 2013 Jul-Dec; 19(2): 49–55.
2. Browning JD, Horton JD. Gallstone disease and its complications. Semin Gastrointest Dis. 2003 Oct;14(4):165-77
3. Diehl AK. Symptoms of gallstone disease. Baillieres Clin Gastroenterol. 1992 Nov;6(4):635-57.
4. Lee JY, Keane MG, Pereira S. Diagnosis and treatment of gallstone disease. Practitioner. 2015 Jun;259(1783):15-9, 2.
5. Sanders G. Gallstones. BMJ. 2007 Aug 11; 335(7614): 295–299.
6. Shaffer EA. Gallstone disease: Epidemiology of gallbladder stone disease. Best Pract Res Clin Gastroenterol. 2006;20(6):981-96.

7. Lammert F, Gurusamy K, Ko CW. Gallstones. Nat Rev Dis Primers. 2016 Apr 28;2:16024.
8. Nakeeb A, Comuzzie AG, Martin L, et al. Gallstones: genetics versus environment. Ann Surg. 2002 Jun; 235(6): 842–849.
9. Chen CY, Lu CL, Huang YS, Tam TN, Chao Y, Chang FY, et al. Age is one of the risk factors in developing gallstone disease in Taiwan. Age Ageing. 1998;27(4):437-41.
10. Novacek G. Gender and gallstone disease. Wien Med Wochenschr. 2006 Oct;156(19-20):527-33.
11. Sun H, Tang H, Jiang S, et al. Gender and metabolic differences of gallstone diseases. World J Gastroenterol. 2009 Apr 21; 15(15): 1886–1891.
12. Lujan JA, Parrilla P, Robles R, Marin P, Torralba JA, Garcia-Ayllon J. Laparoscopic cholecystectomy vs open cholecystectomy in the treatment of acute cholecystitis: a prospective study. Arch Surg. 1998 Feb;133(2):173-5.
13. Chau CH, Tang CN, Siu WT, Ha JP, Li MK. Laparoscopic cholecystectomy versus open cholecystectomy in elderly patients with acute cholecystitis: retrospective study. Hong Kong Med J. 2002 Dec;8(6):394-9.
14. Muller MF, Stehling MK, Wegmann A. Radiologic and ultrasound detection of gallstones. Ther Umsch. 1993 Aug;50(8):547-52.
15. Grande M, Torquati A, Farinon AM. Wound infection after cholecystectomy. Correlation between bacteria in bile and wound infection after operation on the gallbladder for acute and chronic gallstone disease. Eur J Surg. 1992 Feb;158(2):109-12
16. Nuno-Guzman CM, Marin-Contreras ME, Figueroa-Sanchez M, et al. Gallstone ileus, clinical presentation, diagnostic and treatment approach. World J Gastrointest Surg. 2016 Jan 27; 8(1): 65–76.
17. Scheurer U. Clinical manifestations of cholelithiasis and its complications. Praxis (Bern 1994). 1995 May 16;84(20):590-5.
18. Festi D, Sottili S, Colecchia A, et al. Clinical manifestations of gallstone disease: evidence from the multicenter Italian study on cholelithiasis (MICOL). Hepatology. 1999 Oct;30(4):839-46.
19. Qiao T, Ma R, Luo X, et al. The systematic classification of gallbladder stones. PLoS One. 2013; 8(10): e74887.
20. Swidsinski A, Lee SP. The role of bacteria in gallstone pathogenesis. Front Biosci. 2001 Oct 1;6:93-103.