DETECTION OF JAUNDICE IN PATIENTS OF ACUTE CHOLECYSTITIS IN SURGCAL DEPARTMENT.

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ABSTRACT

Aim Of Study: To determine the detection of jaundice in patient of acute cholecystitis in surgical department. **Study Design:** Prospective observational study. **Place & Dura Tion:** Two years study from July 2018 to June 2020 was conducted in the Department of surgery Surgical unit 1 ward 2 at Liaquat University of Medical and Health Sciences, Jamshoro. **Patients & Method:** The prospective observational study was carried out in the Department of Surgery surgical unit 1 ward 2 at Liaquat University of Medical & Health Sciences, Jamshoro. The study comprises 100 patients, all patients were admitted from outpatient department (OPD) .The patients were evaluated fully after history ,clinical examinations Murphy's sign, eye Sign & specific investigations of Liver function test Serum Bilirubin,Aspiratate transaminase (AST0,Alanine transaminase (ALT) Alkaline phosphatase and Gama G T, ultra sound of abdomen ,Hi imino dia acetic acid (HIDA SCAN), in acute cholecystitis Prothrombin time (PT) Activated Partial Thomboplastin Time (APTT) serum amylase, Magnetic resonance cholangiopancreatography (MRCP) , Computed tomography (CT), Endoscopic retrograde cholangio pancreatography .(ERCP). Magnetic resonance imaging (MRI), percutaneous trans hepatic cholangiography (P T C) x- ray chest and abdomen. To exclude other pathology. **Results:** In this study 100 patients of acute cholecystitis. The maximum number of patients were in age range Between 18 to 80 years. 30 patients were in age group 18 to 39 year, 42 patients were in age group 40 to 60 years and 28 patients were in age group 61 to 80 year. 16 patients were presented with positive murphy's sign. 59 patients were presented with deep tenderness, vomiting anorexia nausea and 25 patients were presented with pain ,jaundice ,fever with rigors. 16 patients were presented with bilirubin level range between 1 to 2mg with positive HBSAG, 59 patient were presented with bilirubin range between .5 to 1mg. 25 patient were presented with bilirubin range between 2 to 5 mg . 64 patient were treated by cholecystectomy with in 72 hours and 27 patient were treated by cholecystectomy after six week interval and 9 patients were treated by Radiological guided stone Extraction ,Fragmentation or Dissolution by Methyl tert-butylether (MTBE) and Percutaneous Lithotripsy due to un fit for surgery. **Conclusion:** Choleycystitis is a critical problem all over the word initially patient is asymptomatic then patient present with pain, in right hypochondriaum , pain radiate to back of right site, vomiting ,fever ,with or without jaundice fever with rigors if patient having normal amylase operate with in 72 hours or after six week .

Key Words Acute Cholecystitis, Jaundice, Treatment.

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INTRODUCTION

Cholecystitis means inflammation of gall bladder either calculus or a calculus. Acute or chronic cholecystitis 'word jaundice means increase concentration of bilirubin in the blood or failure flow of bile in the intestine [1].cholecystitis is a common condition in which inflammatory processes seen in the gall bladder either calculus cholecystitis with or with out gall stone, CBD Stone .what ever type of cholecystitis patient presented with pain in right hypochondrium, vomiting ,anorexia nausea , fever with or without rigors pain associated with or with out jaundice. Pain radiate to back of right site of abdomen or pain referred to the tip of right scapula[1,2,3] , patient can present with jaundice due to pressure over common hepatic duct, or common bile duct by phlegm formation of cystic duct ,impacted stone in common bile duct [4] management of

acute cholecystitis is depend on history, clinical examination ,investigations and treatment options of acute cholecystitis ,patient of cholecystitis typical give history of pain developed after eating of fatty foods, on abdominal examination tenderness present in right hypochondrium along with murphyes signs positive.[5,6,7,8] investigation of cholycystitis specific investigations of of Liver function test (LFT) serum Bilirubin, Aspartate transaminase (AST0,Alanine transaminase (ALT) Alkaline phosphatase and Gama G T, ultra sound of abdomen ,Hi iminodia acetic acid (HIDA SCAN), in acute cholecystitis li Prothrombin time (PT), Activated Partial Thomboplastin Time (APTT) serum amylase, ultra sound of abdomen[9] ,Hi iminodiacetic acid (HIDA SCAN), for diagnosis of acute chole for detection of function of gall bladder or not ,liver function test (LFT) for detection of jaundice in patient of acute cholycystitis .[6] HBSAG,HCV SCAN, HIV, AND COVID 19 . International normalized ratio (INR) disturb ,serum electrolyte ,blood urea, sugar ,serum creatinine some time difficult to differentiated other gall bladder pathology may be need of some other investigation proper reach to final diagnosis and exclude the cause of obstructed jaundice by magnetic resonance cholangio pancreatography (MRCP) , computed tomography (CT) endoscopic retrograde cholangio pancreatography .(ERCP). Magnetic resonance imaging (MRI), percutaneous trans hepatic cholangiography (P T C), X-ray chest an abdomen for exclude other pathology. [10,11,12] some times ascending infection seen in common bile duct. Patients present with Charcot trade pain , jaundice fever with rigors [1] . Patient of acute choleycystitis presented with sign and symptoms of .sever pain in right hypochondrium anorexia ,nausea, vomiting ,fever with chills needs emergency admission . Reassure the patient pass wide bore iv cannula no 16or 18, give iv crystalloid fluid, antibiotics, analgesic, catheterize the patient to measure urine out put. simultaneously send liver function test serum bilirubin ,ALT ,AST Alkaline phosphatase and Gama G T, if bilirubin level raised try to correct it [13,14] . Avoid complication of acute cholecystitis such as phelgma formation ,mucocele ,empyema, gangrene,[15] perforation of Gallbladder ,peritonitis, intestinal obstruction septicemia ,SIRS,MODS and MODF.[1] If patient is stable take cardiac and anesthesia fitness was done then treat according cause cholelithiasis, or choledocholithiasis[16,17]. Then do open or laparoscopic cholecystectomy with in 72 hours[18]. if patient is un stable then do interval open or laparoscopic cholecystectomy after six weeks [19] .Unfit patient can be manage by Radiological guided stone Extraction ,Fragmentation or Dissolution by Methyl tert-butylether (MTBE) Percutanous Lithotripsy[1]

PATIENTS & METHODS

It was a Prospective observational study carried out of department of surgery surgical unit 1 ward 2 at Liaquat University of Medical & Health Sciences, Jamshoro from July 2018 to June 2020.

The study comprises 100 patients. All were admitted from out patient department (OPD) The patients were evaluated fully after history ,clinical examinations Murphy's sign, eye Signs & specific investigations of of Liver function test Serum Bilirubin, Aspartate transaminase (AST0,Alanine transaminase (ALT) Alkaline phosphatase and Gama G T, Prothrombin time (PT) Activated Partial Thomboplastin Time (APTT), serum amylase, ultra sound of abdomen ,Hi iminodiacetic acid (HIDA SCAN), in acute cholecystitis for detection of Gallbladder function , Magnetic resonance cholangio pancreatography (MRCP) , Computed tomography (CT) ,Endoscopic retrograde cholangio pancreatography .(ERCP). Magnetic resonance imaging (MRI), Per cutaneous Trans hepatic Cholangiography x- ray chest and abdomen. To exclude other pathology.

Evaluated patients were evaluated fully after history, clinical examinations & specific investigations were recorded on a Performa designed for the study.

Statistical package for social sciences (SPSS) version 10 was used for statistical analysis of the data.

RESULTS

This was a hospital based case series study of 100 patients, The maximum number of patients were in age range between 18 to 80 years. 30 patients were in age group 18 to 39 year, 42 patients were in age group 40 to 60 years and 28 patients were in age group 61 to 80 year. (Table 1) .16 patients were presented with positive murphy's sign. 59 patients were presented with deep tenderness, vomiting anorexia nausea and 25 patients were presented with pain ,jaundice ,fever with rigors. (Table 2). 16 patients were presented with bilirubin range between 1 to 2mg with positive HBSAG .59 patients were presented with bilirubin range between .5 to 1mg. 25 patients presented with bilirubin range between 2 to 5 mg .(Table 3) .64 patient were treated by cholecystectomy with in 72 hours and 27 patient were treated by cholecystectomy after 6 weeks interval and 9 patients were treated by Radiological guided stone Extraction ,Fragmentation or Dissolution by Methyl tert-butyl ether (MTBE) and Percutaneous Lithotripsy due to un fit for surgery[1] . (Table 1V).

Table 1; Age Distribution of Patient n=100		
Age	**No of Patients**	**Percentage%**
18 to 39 year	30	30.0%
40 to 60 year	42	42.0%
61 to 80 year	28	28.0%

Table 2: Clinical Presentation With Sign And Symptoms n=100		
Clinical Presentation With Sign & Symptoms	**No of Patients**	**Percentage %**
Pain with Murphy's sign positive	16	16.0%
Pain , vomiting ,anorexia and jaundice	59	59.0%
Pain ,Jaundice, fever with rigors	25	25 .0%

Table 3: Liver Function Test Level Of Serum Bilirubin n=100		
SERUM BILURUBIN	**No of patients**	**Percentage%**
1 to 2 mg	16	16.0%
0.5 to 1mg	59	59.0%
2 to 5 mg	25	25.0%

Table 4: Treatment Options n=100		
Treatment Options	**No of Patients**	**Percentage %**
Cholecystectomy within 72 Hours	64	64.0%
Cholecystectomy after Six week	27	27.0%
Treated by Radiological guided stone Extraction ,Fragmentation or Dissolution by Methyl tert-butyl ether (MTBE) and Percutanous Lithotripsy	09	9.0%

DISCUSSION

Word jaundice means yellowish discoloration of skin, sclera. mucous membrane due to increased concentration of bilirubin in the blood or failure flow of bile in the intestine. Cholecystitis means

inflammation of gall bladder either acute or chronic in acute inflammation patient presented with sever pain in right hypochondrium with anorexia, nausea, vomiting ,fever with rigors associated with jaundice . cholecystitis may be calculus or acal culus symptoms aggravated after eating fatty foods acute cholecystitits patient presented complications are phelgmana formation, mucocele ,empyema ,gangrene, perforation and peritonitis some time patient presented with jaundice.

Serraltta AS,Bueno R,Planells MR et all.[18] In his study showed. Laparoscopic cholecystectomy for early cholecysistitis , Lau H,Lo CY Patil NG.et all.[19] In his study showed early versus delayed interval laparoscopic cholecystectomy for acute cholecystitis. Kassem A A, Fikry A,Shahin D et all.[20] In his study showed mild elevation of total

bilirubin 0.8 to 207 mg .In gangrenous cholecytitis1.48mg .Total bilirubin after cholecystectomy 1.35 mg Padda MS, Singh SJ , Tang SJ et all.[21] In his study showed sign and symptoms right upper quadrant pain and tender ness ,fever chills nausea and vomiting ,Chen-wang and his collagenous.[22] In his study showed elevated level of aminotransferase level and bilirubin levels ,231 patient who had an acute calculus cholecystitis If the bilirubin is elevated and there is a dilated CBD on US, there is controversy in the literature as to the best test for workup, MRCP or ERCP[21]

Aim of this study detection of jaundice in patient of acute cholecystitis. In this study 100 patients was observed. The maximum number of patients were in age range between 18 to 80 years. 30 patients were presented in age group 18 to 39 year, 42 patients were presented in age group 40 to 60 years and 28 patients were presented in age group 61 to 80 year. .16 patients were presented with positive murphy's sign. 59 patients were presented with deep tenderness ,vomiting anorexia nausea and 25 patients were presented with pain ,jaundice ,fever with rigors. . 16 patients were presented with bilirubin range between 1 to 2mg with positive HBSAG .59 patients were presented with bilirubin range between .5 to 1mg. 25 patients presented with bilirubin range between 2 to 5 mg . .64 patient were treated by cholecystectomy with in 72 hours and 27 patient were treated by cholecystectomy after 6 weeks and 9 patients were treated by Radiological guided stone Extraction ,Fragmentation or Dissolution by Methyl tert-butyl ether (MTBE) and Percutaneous Lithotripsy due to unfit for surgery.

CONCLUSION

Cholecystitis is a common problem all over the word patient can present with long standing a symptomatic if developed symptom after eating fatty foods patient can present with sever pain in right hypocondriam with vomiting, anorexia, nausea , fever with chills and jaundice .jaundice detected clinically as well as with help of lab investigation Liver function test mainly bilirubin .after optimization patients treated by cholecystectomy either open or laparoscopic cholecystectomy .

ETHICS APPROVAL: The ERC gave ethical review approval

CONSENT TO PARTICIPATE: written and verbal consent was taken from subjects and next of kin

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CONFLICT OF INTEREST: No competing interest declared.

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