CLINICAL PRESENTATION OF PATIENTS OF PERITONITES AND ITS EMERGENCY TREATMENT.

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ABSTRACT

Introduction: Peritonitis is a condition in which patients presented with severe abdominal pain. Pain can develop any region of abdomen according to anatomical division of abdomen, peritonitis can developed localized or generalizeintroduction. **Objective:** To determine the clinical presentation of patients of peritonitis and its emergency treatment **Study Design;** Prospective observational study. **Place & Duration:** Two years study from May 2017 to April 2019 was conducted at Liaquat University of Medical and Health Sciences / Jamshoro. **Patients & Method** The study comprises 100 patients. All were admitted from Emergency department. All patients were evaluated fully after history & examinations and specific investigations of ultra sound of abdomen, x ray abdomen supine ad erect posture and x ray chest PA view. Complete blood picture (CBC) Blood urea, sugar, serum electrolyte, HBSAG, HCV, & HIV, LFT, PT, APTT, INR and ECG. Typhi dot, Tuberculin test, Biopsy perforated site and general assessment. **Results:** In these study 100 patients of peritonitis, the maximum numbers of patients were in age group between 15 to 80 years. Out of 100 patients .50 patients were presented with age group between 15 to 45 year, 25 patients were presented with age group between 46 to 64 years. 25 patients were presented with age groups between 65 -80 years. Out of 100 patient, 35 patients were presented with localized peritonitis Out of 100 patient 65 patients were presented with Generalized peritonitis in which 30 patients were presented with bilateral gas under diaphragm .18 patients were presented with multiple air fluid levels, 7 patients were presented with road traffic accident with collection, 5 patients were presented with gun shot injury 5 patients were presented with stab injury . Out of 100 patient .65 patients were needs laparotomy they were operated through mid line incisions, operative findings 12 patient with gastric perforation, 9 patient with ileal perforation, 9 patients with duodenal perforation , 15 patients with adhesions, 3 patients with ischemic gut, 8 patient with intestinal traumatic injury, 5 patients with splenic injury and 4 patients with liver injury 25 patients were operated through gridiron incision , 10 patients were treated conservatively . **Conclusion** Patients of peritonitis present in emergency department it is critical condition if not diagnosed and managed early stage patients can die systemic complications.

Key Words; Peritonitis clinical presentation and treatment options ,

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INTRODUCTION

Peritonitis is a condition in which patients presented with severe abdominal pain. Pain can developed any region of abdomen according to anatomical division of abdomen, peritonitis can developed localized or generalized[1], if patients developed peritonitis, what ever type or cause of peritonitis. Patients developed pain either mild .moderate or sever intensity, patient wants to relieved pain[2]. Peritonitis is a problem all over the word localized peritonitis seen in cholecystitis, pyelonephritis, and appendicitis[3]. Generalized peritonitis seen in pancreatitis after perforation of gallbladder, perforation of uterus, small intestine perforation due to typhoid, tuberculosis .Gastric or duodenal perforation and ruptured liver abscess [3,4]. Peritonitis can developed after Road traffic accident (RTA) , blunt trauma, stab injury or gunshot injury.[5] Peritonitis can developed with out cause may be seen in young girls , immune compromised patients they were suffered in diabetes mellites, tuberculosis, jaundice, uremia some time patients in Intensive care unit after burn .What ever type of peritonitis patients developed pain, guarding, rigidity, vomiting constipations, dehydration and fever with rise of leucocyte count[6,7] .If not treated and diagnosed early so

patients looks toxic, dehydrate, typical face (Hippocratic face)[8] .If patient developed sign and symptoms of peritonitis try to diagnose and treat as soon as possible[8] ,Diagnosis depend on history, clinical examinations and investigations, through blood complete picture, ESR ,blood urea ,blood sugar, serum electrolyte, liver function test, Pro thrombin time,(PT)Activated partial thrombin time (APTT) HBSAG, HCV, HIV and serum amylase with help of imaging ultrasound of abdomen, x ray abdomen supine or erect posture, x ray chest necessary Focused abdominal sonogram tomography (FAST) some time C T abdomen, MRI, MRA abdomen ,diagnostic peritoneal lavage, diagnostic laparoscopy [10] may be helpful in those patient who are stable and diagnosis is doubt full. Initial management of patients of peritonitis. Keep nil per orally (NPO), pass nasogastric tube, introduce two wide bore cannula ,re hydrate the patients, give antibiotics cover both aerobic and an aerobic bacteria, antipyretics catheterized the patients aim is optimized the patient and prepare the patient for surgery. Laparotomy release bands, adhesion lysis, ileostomy, colostomy, primary repair, right hemi colectomy grams omental patch liver repair splenectomy [11.] .If patient developed peritonitis at the time of night try to treat it at night before sun rise[12,13] . peritonitis is a critical conditions if not treat early patients can developed complications hypothermia, .metabolic acidosis, disseminated intravascular coagulation (DIC), systemic inflammatory response syndrome (SIRS) may lead multiple organ dysfunction syndrome (MODS) multiple organ dysfunction failure MODS may lead(MODF) [8,,14,] .

PATIENTS & METHODS

It was a Prospective observational study carried out at surgical emergency ward at Liaquat University of medical and health sciences Hyderabad /Jamshoro from May 2017to April 2019. The study comprises 100 patients. All were admitted from Emergency department. The patients were evaluated fully after history & clinical examinations and specific investigations ultra sound of abdomen ,x ray abdomen supine and erect posture , x ray chest PA view ,CBC, blood urea, blood sugar, serum electrolyte ,serum creatinine, liver function test, serum amylase, ECG ,HBSAG, HCV,HIV PT, APTT Conservatively.(Table1V) AND INR, in traumatic patient need Focused abdominal sonogram tomography (FAST) Computed tomography (CT), Magnetic resonance image (MRI) , Diagnostic peritoneal lavage (DPL) Typhi dot, Tuberculin test, perforated site biopsy were taken and 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 group between 15 to 80 years. Out of 100 patients, 50 patients were presented with age group between 15- 45 year. 25 patients were presented with age group between 46 to 64 years. 25 patients were presented with age group between 65 to 80 year.(Table 1) Out of 100 patients ,35 patients were presented with localized peritonitis ,65 patients were presented with generalized peritonitis in which 30 patients were presented with bilateral gas under diaphragm .18 patients were presented with multiple air fluid levels. 7 patients were presented with road traffic accident 5 patients were presented with gun shot injury 5 patients were presented with stab injury (Table 11). Out of 100 patients, 65 patients needs laparotomy they were operated through mid line incisions, 25 patients were operated through gridiron incision and 10 patients were treated conservatively (Table 111) .Out of 100 patient Operated findings of 65 patients who were operated through mid line incisions, operative findings with operative procedure are ,12 patient were operated with gastric perforation (Gastric repair), 9 patient were operated with ileal perforation (3 patient with tuberculous perforation,6 patient with typhoid perforation 5 primary repair,4 ileostomy) 9 patients were operated with duodenal perforation (Grahams patch) , 15 patients were operated with intestinal adhesions (Adehenolysis), 3 patients were operated with ischemic gut (Resection and anastomosis). 8 patient were operated with intestinal traumatic injury,(Primary repair) 5 patients were operated with splenic injury (Splenectomy),4 patients were operated with liver injury(Liver repair and packing) . 25 patients were operated through gird iron incision (Appendectomy) and 10 patients treated

Table 1; AGE DISTRIBUTION

Age of the Patients	No of Patients	%
15 to 45 year	50	(50%)
45 to 64 year	25	(25%)
65 to 80 year	25	(25%)

Table 2; CLINICAL PRESENTATION, TOTAL NO OF PATIENTS = 100		
No of Patients	**Percentage**	**Clinical Presentation**
35	35%	Localized peritonitis
30	30%	Bilateral gas under diaphragm
18	18%	Multiple air fluid levels
17	17%	Traumatic peritonitis RTA Gunshot injury ,stab injury

Table 3; **TREATMENT OPTIONS**		
No of Patients	**Procedure**	**Percentage**
65	Laparotomy	**65%**
25	Appendectomy	25%
10	Conservatively	10%

Table 4; LOCALIZATION OF PATHOLOGY WITH TREATMENT OPTIONS			
No of Patients	**Percentage %**	**Type**	**Surgical Site Infections**
12	12%	Gastric perforation	Gastric Repair
09	09%	Ileal perforation	5 Primary repair 4 Ileostomy
09	09%	Duodenal perforation	Graham patch
15	15%	Intestinal adhesion	Adhenolysis
8	8%	Intestinal traumatic perforation	Primary repair
5	5%	Splenic injury	Splenectomy
4	4%	Liver injury	Repair and Packing

DISCUSSION

Peritonitis is a critical condition if patients developed sign and symptoms of peritonitis means challenge able to physicians, radiologist as well as surgeons. patients developed pain in abdominal cavity either moderate to sever intensity with variable character localized or generalized peritonitis with or without cause initially need emergency measures because patients developed peritonitis due to obstruction, inflammation, traumatic collection, perforation may lead to pain, vomiting, dehydration, distention of abdomen ,shock, infection and fever .[15] So initially need conservative treatment keep NPO. pain killer, wide bore I v canula, crystalloids or colloids fluid, blood transfusion antibiotics then surgical intervention according to causes of peritonitis can be diagnose with help of history ,clinical examinations & investigations blood cp , ESR ,serum electrolyte , blood urea, blood sugar, serum creatinine ,serum amylase, LFT, HBSAG ,HCV, HIV, ultra sound of abdomen, x ray chest, x ray abdomen supine or erect posture if patients stable advise emergency C T , MRI and MRA abdomen ,diagnose peritoneal lavage FAST.[10] Treatment depend on according to clinical

presentation and cause of peritonitis. Shanker M Ret al[14,16] .In his study appendicular perforation was the common cause then peptic ulcer perforation. 26% under went emergency operation ,male to female ratio of 2.84;1 and age between 41 to 51 year ,patient reach in hospital with 24 hour is easily recover .if patient reach after 24 hours developed complications (11%). The overall mortality rate associated with peritonitis was (15%) with the highest mortality rates observed in solid organ rupture (35%) perforated peptic ulcer (33%) primary peritonitis(27%) Tubo ovarian abscess (20) Small bowel perforation (15%) .Abdul latief M et al.[17] In his study patient presented wit abdominal pain ,fever and chills and Ascites initially antibiotics recommended in pelvic inflammatory diseases ,surgical drainage in abscess, intestinal repair or anastomosis in intestinal injury. ,colostomy in colorectal pathology. Jonathan C Set al[18]. common etiologies of peritonitis were appendicitis. Volvulus, peritonitis, hypotension, tachycardia ,anemia associated with 15% mortality.'Rajandeep SB et al[19]. in his study the most commonest cause of peptic ulcer perforation peritonitis include total 179 out of duodenal ulcer 150,gastric ulcer 29,appenendecitis 74,Typhoid fever 48,Tuberculosis 40, and trauma 31. Total mortality 31 Laxim N Met al[20]. in this study male-to -female ratio being 10.33:1 About 79.2% of the patients were below 50 years. Free gas under diaphragm on chest X-ray was noted in 86.2% cases. Duodenum was the most common site of perforation in 158 patients. The most common etiology for perforation was acid peptic disease (41.4) Simple closure was performed in 63.8%,Morbiditya 42.8%nd mortality14.7 % .Kondoju S K et al[21]. in this study most common perforation seen in duodenum (59.3),colon (1.1%) duodenal perforation seen in age group of 30-39 years(26.58) youngest case 17 years old age 80 year average 44 year peptic ulcer perforation is more common in low socioeconomic group 91.13% smoking and alcohol are risk factor in duodenal perforation.

In this study the maximum number of patients were in age group between 15 to 80 years. Out of 100 patient ,50 patients were presented with age group between 15 to 45 year. 25 patients were presented with age group between 46 to 64 years. 25 patients were presented with age group between 65 to 80 year. Out of 100 patients ,35 patients were presented with localized peritonitis ,65 patients were presented with Generalized peritonitis in which 30 patients were presented with bilateral gas under diaphragm .18 patients were presented with multiple air fluid levels. 7 patients were presented with road traffic accident 5 patients were presented with gun shot injury 5 patients were presented with stab injury . Out of 100 patients, 65 patients needs laparotomy they were operated through mid line incisions, 25 patients were operated through gridiron incision and 10 patients were treated conservatively .Out of 100 patient Operated findings of 65 patients who were operated through mid line incisions, operative findings with operative procedure are ,12 patient were operated with gastric perforation (Gastric repair), 9 patient were operated with ileal perforation (3 patient with tuberculous perforation,6 patient with typhoid perforation 5 primary repair,4 ileostomy) 9 patients were operated with duodenal perforation (Graham patch) , 15 patients were operated with intestinal adhesions (Adehenolysis), 3 patients were operated with ischemic gut (Resection and anastomosis). 8 patient were operated with intestinal traumatic injury,(Primary repair) 5 patients were operated with splenic injury (Splenectomy),4 patients were operated with liver injury(Liver repair and packing) . 25 patients were operated through gird iron incision (Appendectomy) and 10 patients treated conservatively.

CONCLUSION

Peritonitis is the emergency condition patient can presented with localized, ,, or generalized peritonitis what ever cause , pathology of peritonitis, patient need admission ,investigation, and optimization, after confirmation of diagnosis patient need treatment according to pathology ,laparotomy. Gird iron incision, or conservative treatment. Aim is that to prevent morbidity, and mortality of the patient.

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