Prevalence and Management of Peptic Ulcer with Combination Therapy

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Abstract: Peptic ulcer embraces both gastric and duodenal ulcers and has been a major threat to the world's population over the past two centuries, with a high morbidity and substantial mortality. The aim of study was to determine the prevalence rate of Peptic ulcer in patients of different age groups and to find out the treatment of peptic ulcer with the suitable combination therapy.

A standardized data collection form was designed for the purpose of conducting this study which was filled after the verbal communication with the patients. Questions related to prevalence and management of peptic ulcer were added and data was collected & results were presented in tabular & graphical form.

Prevalence of Peptic ulcer in Fifty Patients suffering from Peptic ulcer was observed by examining their profiles and Test reports. Prevalence of patients suffering from peptic ulcer (in different age groups) was found. There was a high incidence in 33-48years age group (42%). The predominant causes are infection with Helicobacter pylori and use of non-steroidal anti-inflammatory drugs.

The prevalence of peptic ulcer in fifty male and female patients suffering from peptic ulcer disease was observed, there was high incidence in age group 33-48 years (42%). It was found that Most of the patients (46%) were suffering from NSAIDS induced peptic ulcer and triple therapy regimen for 7-14 days consisting of proton pump inhibitors, cytoprotective agents and antibiotics was mostly prescribed by physician to patients which was very effective and patients were satisfied with their medication therapy. The effectiveness of Combination therapy was observed in management of peptic ulcer disease in fifty male & female patients which was (100%).

Keywords: Peptic ulcer, Prevalence, Management, Combination Therapy, Recovery of Patients.

I. INTRODUCTION

Peptic ulcer is a sore in the lining of stomach or duodenum. The duodenum is the first part of small intestine. If peptic ulcers are found in the stomach, they are called gastric ulcers. If they are found in the duodenum, they are called duodenal ulcers. Peptic ulcer disease develops when the protective mechanisms of the gastrointestinal mucosa, such as mucus and bicarbonate secretion, are overwhelmed by the damaging effects of gastric acid and pepsin. [1], [2] People more likely to develop a peptic ulcer if they have an H. pylori infection ,use NSAIDs often ,smoke cigarettes ,drink alcohol , 50 years old or older, have relatives who have peptic ulcers puts you at risk of having them too. Peptic ulcers will get worse if they aren't treated. [3] Symptoms of peptic ulcer disease commonly include Gnawing pain, burning discomfort, and tenderness in the epigastric area, epigastric pain, postprandial pain and nocturnal pain, pain that can wake the patient from sleep, and pain relieved by food or antacids. [4] Diagnostic testing for PUD includes procedures used to document the presence of an ulcer, usually endoscopy, and tests that document the presence of H. pylori infection. [5] Combination therapy is treatment of choice. Triple therapy consisting of Proton pump inhibitor and antibiotics is Management of peptic ulcer disease generally involves the practice of H2 receptor antagonists, use of proton pump inhibitors, antacids and different H. pylori eradication regimens. [6] The aim of study was to determine the prevalence of peptic ulcer in random population, the management of peptic ulcer with combination therapy used these days in clinical settings, which age group of patients is more effected by peptic ulcer disease, the efficacy and the adverse effects of medication therapy in peptic ulcer patients, the effectiveness of combination therapy in patients suffering from peptic ulcer.

Vol. 2, Issue 2, pp: (76-80), Month: October 2014 - March 2015, Available at: www.researchpublish.com

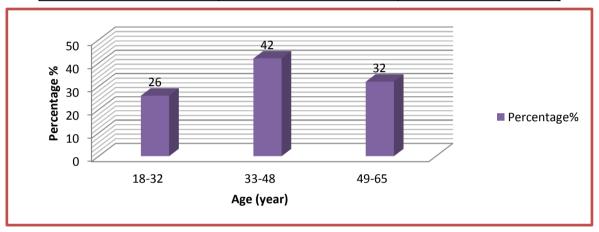
II. METHODOLOGY

A standardized data collection form was designed for the purpose of conducting this study which was filled after the verbal communication with the patients. Questions related to prevalence and management of peptic ulcer were added and data was collected & results were presented in tabular & graphical form.

Results:

Table 1: Prevalence of Patients suffering from peptic ulcer in relation to age distribution N=50

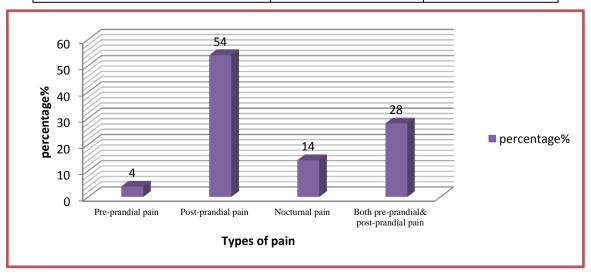
Age (years)	Frequency	Percentage %
18-32	13	26
33-48	21	42
49-65	16	32



Prevalence of patients suffering from peptic ulcer (in different age groups) was found. There was a high incidence in 33-48 years age group (42%).

Table 2: Types of pain

Types	Frequency	Percentage%
Pre-prandial pain	2	4
Post-prandial pain	27	54
Nocturnal pain	7	14
Both pre-prandial& post-prandial pain	14	28



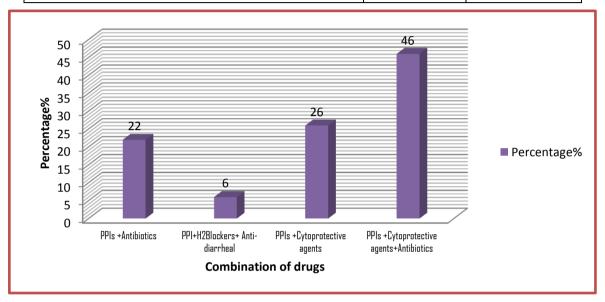
International Journal of Healthcare Sciences ISSN 2348-5728 (Online)

Vol. 2, Issue 2, pp: (76-80), Month: October 2014 - March 2015, Available at: www.researchpublish.com

It was determined that 54% patients suffered from postprandial pain, 28% patients suffered from both pre-prandial and post-prandial pain, 14% patients felt nocturnal pain and only 4% patients felt pre-prandial pain.

Table 3: Combinations of drugs mostly prescribed by the physician to the patients for the cure of peptic ulcer

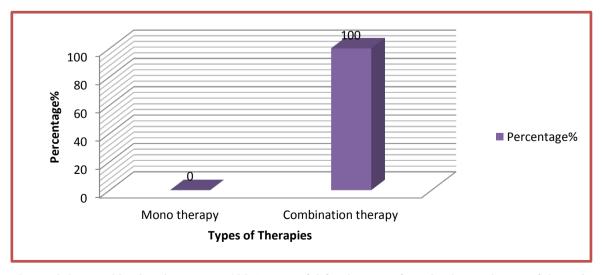
Combination of drugs	Frequency	Percentage%
PPIs +Antibiotics	11	22
PPI+H2Blockers+ Anti-diarrheal	3	6
PPIs +Cytoprotective agents	13	26
PPIs+Cytoprotective agents+Antibiotics	23	46



It was found that, to 46% patients PPIs+ cyto-protective agents+ antibiotics were given and to 22% of patients PPIs+ antibiotics were given. Physician prescribed PPIs+ cyto-protective agents to 26% patients and PPIs+ H2 Blockers+ Anti-diarrheal to 6% of the patients.

Table 4: Which therapy is more effective for treatment of peptic ulcer?

Types of therapies	Frequency	Percentage%
Mono therapy	0	0
Combination therapy	50	100



It was observed that combination therapy was 100% successful for the cure of peptic ulcer and most of the patients got recovery after completing their medication course.

International Journal of Healthcare Sciences ISSN 2348-5728 (Online)

Vol. 2, Issue 2, pp: (76-80), Month: October 2014 - March 2015, Available at: www.researchpublish.com

Recovery from medication courseFrequencyPercentage%Yes4794No36

Table 5: Patients got recovery after completing medication course

Dercentage% 80 80 80 80 80 80 80 80 80 80 80 80 80	94	6	■ Percentage%
	Yes	No	
Recovery from medication course			

It was found that 94% of patients completed their medication course and got recovery after completing medication course but 6% patients did not.

III. DISCUSSION

The study was conducted to evaluate the prevalence of peptic ulcer in random population, the management of peptic ulcer with combination therapy used these days in clinical settings and to review the effectiveness of combination therapy in patients suffering from peptic ulcer. During one month study period, a total of 50 data collection forms were filled from the patients suffering from peptic ulcer. Prevalence of patients suffering from peptic ulcer (in different age groups) was found. There was a high incidence in 33-48 years age group (42%). The prevalence of peptic ulcer in 18-32 age group was (26%) and in 49-65 years age group was (32%). Prevalence of diagnosed peptic ulcer was found. 46% of patients suffered with NSAIDS induced peptic ulcer, 26% had food induced peptic ulcer, 18% had H.Pylori induced and only 10% had smoking induced peptic ulcer. In 28% patients ultrasound was used to diagnose peptic ulcer, H.Pylori tests were conducted in 22% patients. 42% patients had all the symptoms of peptic ulcer and in only 4% patient's endoscopy was used. It was found that 94% of patients completed their medication course and got recovery after completing medication course but 6% patients did not. It was found that 100% of patients were treated with medication therapy and got recovery. It was observed that, to 72% of patients triple therapy regimen for 7-14 days was recommended for the cure of peptic ulcer, to 22% of patients H.Pylori eradication therapy was recommended and to 6% patients' quaternary therapy was recommended. It was found that, to 46% patients PPIs+ cyto-protective agents+ antibiotics were given and to 22% of patients PPIs+ antibiotics were given. Physician prescribed PPIs+ cyto-protective agents to 26% patients and PPIs+ H2 Blockers+ Anti-diarrheal to 6% of the patients. It was observed that combination therapy was 100% successful for the cure of peptic ulcer and most of the patients got recovery after completing their medication course.

IV. CONCLUSION

The prevalence of peptic ulcer in fifty male and female patients suffering from peptic ulcer disease was observed, There was high incidence in age group 33-48 years (42%). the present study revealed the clinical and epidemiological significance that peptic ulcer has attained in the study area. It was found that Most of the patients (46%) were suffering from NSAIDS induced peptic ulcer and triple therapy regimen for 7-14 days consisting of proton pump inhibitors, cytoprotective agents and antibiotics was mostly prescribed by physician to patients which was very effective and patients were satisfied with their medication therapy. After completing the medication course 94% of patients got recovery while 6% of patients did not complete their medication course and did not get significant recovery. The effectiveness of Combination therapy was observed in management of peptic ulcer disease in Fifty male & female patients which was (100%).

International Journal of Healthcare Sciences ISSN 2348-5728 (Online)

Vol. 2, Issue 2, pp: (76-80), Month: October 2014 - March 2015, Available at: www.researchpublish.com

ACKNOWLEDGEMENT

Alhamdulillah. Thanks to Allah SWT, The most glorified, the most high and Compassionate" whom with His willing giving us the opportunity to complete this project efficiently and successfully. Deepest thanks and appreciation to our parents, who pray for our success, family, and others for their cooperation, encouragement and full of support for the report completion, from the beginning till the end. We would like to express my special gratitude and thanks to Director PROF DR MAQSOOD AHMAD, Institute of Pharmacy, LCWU for his consolatory behavior and affection during the course of study. The special thank goes to our helpful Vice Chancellor, Mrs. Sabiha Manzoor for her support. We are very grateful to the following: all the Peptic ulcer patients who out of their own made themselves available for the study, the administrators and ethic committee members of Sir Ganga Ram Hospital & Services Hospital who gave us a chance of working there and to complete our study. Special thanks to Dr. Afshan & Dr. Farida in Sir Ganga Ram Hospital for her Support and guidance. We are grateful to Chief Pharmacist of Services Hospital Madam Balqees for her support. We are highly indebted to our Supervisor Dr. Mariam Zaka for her guidance and constant supervision as well as for providing necessary information regarding the project report & also for her support in completing the project report. We would like to express our special gratitude and thanks to our friends, colleague, for giving us such attention and time in developing the project report and people who have willingly helped.

REFERENCES

- [1] Lanza FL, Chan FK, Quigley EM; Practice Parameters Committee of the American College of Gastroenterology. Guidelines for prevention of NSAID-related ulcer complications. Am J Gastroenterol. 2009;104:728-738.
- [2] Laine L. Nonsteroidal anti-inflammatory drug gastropathy. Gastrointest Endosc Clin N Am 1996; 6: 489–504.
- [3] McColl KE, Murray LS, Gillen D, Walker A, Wirz A. Fletcher J, Mowat C, Henry E, Kelman A,Dickson A. Randomized trial of endoscapy with testing for Helicobacter pylori compared with non-invasive H pylori testing alone in the management of dyspepsia. BBMG, 2002; 324(7344): 999-1002.
- [4] Gorbach SL. Probiotics in the third millennium. Dig Liver Dis. 2002;34(Suppl 2):S2-S7.
- [5] GrahamDY, Rakel RE, Fendrick AM, et al. Recognizing peptic ulcer disease: keys to clinical and laboratory diagnosis. Postgrad Med. 1999;105(3):113-133.
- [6] Konno M, Yokota S, Suga T, Takahashi M, Sato K, Fujii N. Predominance of mother-to-child transmission of Helicobacter pylori infection detected by random amplified polymorphic DNA fingerprinting analysis in Japanese families. Pediatr Infect Dis J. Nov 2008;27(11):999-1003.