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Research Article

**RATE OF OCCURRENCE OF VARICES IN ESOPHAGUS
AMONG PATIENTS SUFFERING FROM UPPER
GASTROINTESTINAL BLEEDING****Dr Muhammad Talha Liaquat, Dr Muhammad Tayyab, Dr Munim Kareem.**
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Abstract:

Objective: The aim of this research work is to examine the occurrence of the varices in esophagus in the patients suffering from upper GI (gastro-intestinal) bleeding.

Methodology: This was transverse research work. Total 100 patients suffering from upper gastro-intestine bleeding were the part of this research work. We performed the endoscopy of upper GI after getting information about history and medical examination, to evaluate the reason of bleeding and we entered all the relevant data on a well-organized Performa arranged by our specialists.

Results: Total 100 patients in which fifty-six were males and forty-four were females, suffering from upper GI bleeding were the part of this research work. Varices of esophagus were present in 53 patients whereas duodenal ulcer was present in twelve patients, gastric ulcer was available in fourteen patients, gastro-duodenal erosions were present in 16 patients, 2 patients were suffering from erosive esophagitis, only one patient was the victim of Mallory-Weiss tear, gastric carcinoma was present in 1 patient & one patient was present with coagulopathy.

Conclusion: The varices of esophagus are very frequent reason of the upper gastro-intestine hemorrhage in this particular region.

Key Words: Gastro-Intestine, Bleeding, Hemorrhage, Carcinoma, Varices, Esophagus, Coagulopathy.

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INTRODUCTION:

Upper GI bleeding is very serious complication which has association with very high rate of mortality as well as morbidity. It is also the very frequent issue for the admissions in the hospitals in the whole world. The hemorrhage from the GI tract has establishment by both hematemesis and/or melena. This disease very uncommon in the shape of hematochezia. The vomiting of the blood is hematemesis [1]. The occurrence of the upper gastro-intestine in USA per annual is about 102 per 100000 [2] with a rate of mortality as 5.570% [3]. Total 3 predictors of the mortality in the patients suffering from the upper GI bleeding in the hospital are advance age, co-morbidities & hemodynamic compromise [4]. There are a number of sources for the origination of this complication [5] like disease of peptic ulcer, varices of esophagus, Mallory-Weiss tear, duodenal erosions, and erosions in esophagus, gastric neoplasms and many other occurrences of rare complications.

The factors behind the reason of emerging this disease can be available in large amount in various geographical regions of the world. The two very frequent reasons of hemorrhage are disease of peptic ulcer & varices of esophagus and among these 2 factors, varices of esophagus are the most common reason of the disease in our country Pakistan [6]. Current data have suggested that the amount of the patients with disease of peptic ulcer has decreased [7]. The mortality rate in case of the continuous hemorrhage has reached to 70.0% to 80.0% [8]. The danger of the re-bleeding is very high until the demolishment of the gastro-esophageal varices is not complete [9]. Total 3 most important predictors of hemorrhage are seriousness of the liver diseases, size of varices & availability of the red marks on the surface of varices [10].

METHODOLOGY:

This was a transverse research work carried out in the departments of emergency & medicine of the Mayo Hospital, Lahore. Total duration of the information collection was about one year from April 2018 to May 2019. Total 100 patients suffering from the upper gastro-intestine hemorrhage were the part of this research work. Non-probability sampling method was in use for the selection of the patients. All the young patients appeared with the upper GI hemorrhage in the shape of hematemesis or/and melena were the part of this research work. When the origin of the hemorrhage was in the lower or upper airways, endoscopy was not suitable for the patient due to clinical issues as complication in respiratory system, or the not obliging patient or suffering from any other serious

complication or refused to get further treatment were not the part of this research work.

The diagnosis of these patients carried out on the basis of the melena & hematemesis. These patients got admissions in the medical & emergency departments of the Mayo Hospital, Lahore. We took the consent of the patients after describing them the purpose of the study. We carried out the collection of the information and medical examination for diagnosis in the start of the study. We also investigated the precipitating factors. Then patients underwent for the endoscopy of upper GI. Endoscopy department of the same hospital completed the endoscopic examination of the patients. SPSS V. 10 was in use for the statistical analysis of the collected information. Averages and SD values were in use for the representation of the quantitative information.

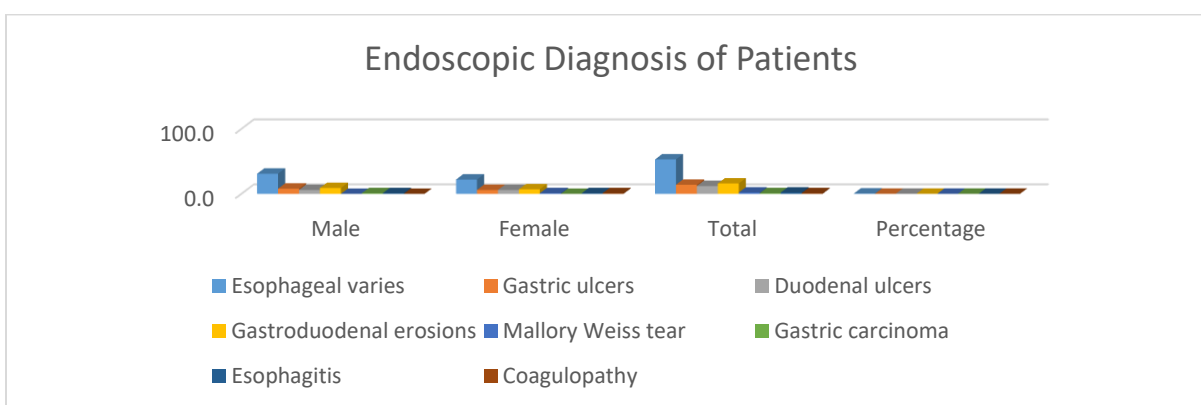
RESULTS:

One hundred patients from both genders were the part of this research work. Average age of the patients was 47.46 ± 11.79 years with arrange of age from 19 to 80 years. Total 61.0% (n: 61) patients appeared with both melena & hematemesis whereas 22.0% (n: 22) patients were present with only melena & 17.0% (n: 17) patients were present with the hematemesis. Total 53.0% (n: 53) patients, thirty-one males & twenty-two females were present with bleeding from varices. Jaundice was available in 39.60% (n: 21) patients among them. All these patients were available with some signs of liver cirrhosis. Total 58.50% (n: 31) patients were present with anti-HCV antibodies & 34% (n: 18) patients were present as positive for HBV. Remaining 4 (07.50%) patients were available with negative viral. Wilson's disease was present in one patient and three patients were the alcoholics. Duodenal ulcer was present in 12 patients. No patient among them was alcoholic. Hypo-tension, pallor & tachycardia were available in 6 patients, other were stable hemodynamically.

Fourteen patients were suffering from gastric ulcer in which eight were males and six were females. Acute gastro-duodenal erosions were available in sixteen patients in which nine were males and six were females. Endoscopy diagnosed erosive esophagitis in two patients. Mallory-Weiss tear was the main reason behind the hematemesis in only single patient who was female of twenty year of age. Stomach carcinoma was present as accountable for hematemesis in single patient. Clinical assessment discovered remarkable loss of the weight & unimportant epigastric tenderness. Endoscopy displayed a gastric ulcer with doubt of malignancy, which underwent histopathology

for confirmation. In one female the reason of the hemorrhage was coagulopathy. The findings of the endoscopy are present in Table-1.

Causes	Male	Female	Total	Percentage
Esophageal varices	31.0	22.0	53.0	53.00%
Gastric ulcers	8.0	6.0	14.0	14.00%
Duodenal ulcers	6.0	6.0	12.0	12.00%
Gastroduodenal erosions	9.0	7.0	16.0	16.00%
Mallory Weiss tear	-	1.0	2.0	1.00%
Gastric carcinoma	1.0	-	1.0	1.00%
Esophagitis	1.0	1.0	2.0	2.00%
Coagulopathy	-	1.0	1.0	1.00%



DISCUSSION:

The hemorrhage from the upper tract of GI is very frequent clinical emergency which is responsible for high rate of morbidity as well as mortality. The most appropriate and ideal method in the identification and the administration of this complication is early endoscopy because of detection precision. There are many different reason of this complication depending upon the geography of the regions as occurrence of the liver cirrhosis, use of alcohol, habits of cigarette smoking & incidence due to helicobacter pylori. Peptic ulcer & esophageal varices are very frequent reasons of this clinical complication. In this research work bleeding from esophageal varices was the most frequent reason of this complication in this research. In USA, the rate of bleeding due to varices varies from 5.0% to 30.0% [11] and bleeding due to peptic ulcer is responsible for 50.0% [12]. In the adults of our country Pakistan, HBV is accountable for thirty percent patients of viral hepatitis of acute nature [13]. The rate of its carrier is 1.50 to 2.10% [14, 15]. In the same manner, the occurrence of infection of HCV was available in 4% to 12.50% [16]. This was very high as compared to the modern world as USA [17, 18].

In his research work, Lakhwani MN displayed the disease of peptic ulcer as the most common reason and accountable for 83.60% patients of upper GI hemorrhage [19]. In another research work in Pakistan discovered the esophageal varices as the most common reason with 44.0 and peptic ulcer as the 2nd most frequent accountable for 19.70% [20]. In one another study, esophageal varices were the most common complication followed by gastric erosions [21]. In one other case work conducted in Pakistan, Hassan SR stated that 34.0% patients suffering from epigastric pain were available as positive for helicobacter pylori antibodies [22]. Just like the chronic hepatitis, the H. pylori infection is the reason of rise in the disease of peptic ulcer because of high rate of association from 85.0% 90.0% [23]. So testing of this H. pylori is necessary in the management of the peptic ulcer. Most of the drugs should not be use in condition of empty stomach [24].

CONCLUSIONS:

This is very important to acknowledge the fact that gastro-intestinal hemorrhage is very serious and perplexing issue and it requires rapid attention. The hemorrhage due to esophageal varices is very

dangerous complication portal hypertension & it is one of the important reasons of disability and mortality in the patients suffering from upper GI hemorrhage. The prevention of the cirrhosis is very important after the occurrence of this complication.

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