



ORIGINAL ARTICLE

Retrospective Study of Cirrhotic Patients with Frequency of Hematemesis

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MAS; Conceptualization of project,
data collection, literature search,
writing manuscript, statistical analysis,
drafting, revision and final approval.

ABSTRACT

Objectives: To assess the Frequency of hematemesis in cirrhotic patient.

Methodology: A retrospective study was carried out on registered patients presented in OPD of medicine ward , Allama Iqbal Memorial Teaching Hospital, Sialkot in 2023.

Result:

- CLD = 29.08%
- DCLD = 54.26%
- Hepatitis = 5.46%

Gender:

- Male = 67.20%
- Female = 32.79 %

Age:

- < 30 years = 11.23%
- 31-40 years = 19.72%
- 41-50 years = 29.35%
- 51-60 years = 24.54%
- >60 years = 15.13%

Residence

- Rural = 35.55%
- Urban = 64.44%

Conclusion: This study investigated the hematemesis in cirrhotic patients. A total of 2994 patients were analyzed. 1177 were diagnosed with Liver Cirrhosis and out of which 436 were presented with hematemesis.

Keywords: Acute cholecystitis, laparoscopic cholecystectomy, diagnostic methods, treatment outcomes, Imran Idrees Hospital Sialkot, retrospective descriptive study, demographic analysis, ultrasound, open cholecystectomy, and conservative management

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Introduction

A retrospective study is a type of research design commonly used in the fields of medicine and allied disciplines to investigate the relationship between variables or to explore the outcomes of a particular

intervention or exposure. Unlike prospective studies, which follow participants forward in time, retrospective studies look backward in time and analyze existing data from the past. These studies can provide valuable insights into the causes and effects of various medical

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conditions, treatment outcomes, and other relevant factors.¹ The primary objective of a retrospective study in the field of medicine and allied cases is to examine historical data to uncover patterns, associations, and potential correlations that can help researchers better understand certain phenomena.

This type of study design is particularly useful in situations where conducting a prospective study may be impractical due to factors such as time constraints, high costs, or ethical concerns.¹

Medicine is the science, art or practice used for the diagnosis, treatment and prevention of symptoms of diseases in technical use often taken to exclude surgery. However, medicine itself has multiple branches like pulmonology, gastroenterology, psychiatry, paediatrics, endocrinology, dermatology and urology.²

The common diseases of medicine and allied in Pakistan are as follows:

Malaria, TB, Dengue, Cancer, Ischemic heart disease, Stroke, Diabetes, Hepatitis, HIV/AIDS.

Long standing primary causes of death include Viral hepatitis, dengue, TB, malaria, typhoid, HIV and cholera. These common health issues are a result of urban overpopulation, subpar sanitation, tainted water supplies and insufficient socio-economic conditions.³ Cirrhosis of the liver is a serious condition where scar tissue replaces healthy liver tissue, often caused by long-term liver damage and enforcement of esophageal vein causing esophageal varices and resulting in hematemesis.⁴

Causes:

It can result from various factors such as excessive alcohol consumption, viral hepatitis, or fatty liver disease. Early detection and management are crucial for better outcomes. Hematemesis refers to the vomiting of blood.⁵

Causes:

It can indicate a variety of underlying medical conditions, including peptic ulcers, esophageal varices, or gastritis.⁶

Types:

1. Upper gastrointestinal bleeding: Originating from the esophagus, stomach, or duodenum.
2. Mallory-Weiss tear: Tears in the mucous membrane at the junction of the esophagus and stomach, often due to severe vomiting or retching.
3. Peptic ulcer disease: Ulcers in the stomach or duodenum that can lead to bleeding.
4. Esophageal varices: Enlarged veins in the esophagus, usually due to liver cirrhosis.
5. Gastritis: Inflammation of the stomach lining, which can cause bleeding.
6. Gastroesophageal reflux disease (GERD): Severe cases can lead to erosive esophagitis and bleeding.
7. Hemorrhagic gastritis: Inflammation of the stomach lining with bleeding.
8. Cancer: Tumors in the gastrointestinal tract can cause bleeding, including esophageal, gastric, or duodenal cancer.⁷

Causes

Portal hypertension leading to varices, coagulopathy, and increased risk of gastrointestinal bleeding.

Diagnosis

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Diagnostic Methods: Endoscopy, imaging studies, and laboratory tests to identify the source of bleeding.

Management

Surgical and Radiological Interventions: Transjugular intrahepatic portosystemic shunt (TIPS), balloon tamponade.⁸

Objectives: To assess the Frequency of hematemesis in cirrhotic patient.

Methodology:

A retrospective study was conducted from January-December 2023 on “Frequency of hematemesis in cirrhotic patient” in emergency Department of Allama Iqbal Memorial Teaching Hospital, Sialkot

Results

CLD = 29.08%

DCLD = 54.26%

Hepatitis = 5.46%

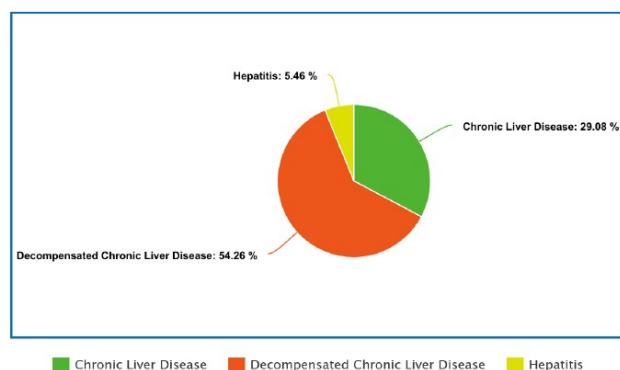


Figure-1

Gender:

Male = 67.20%

Female = 32.79 %

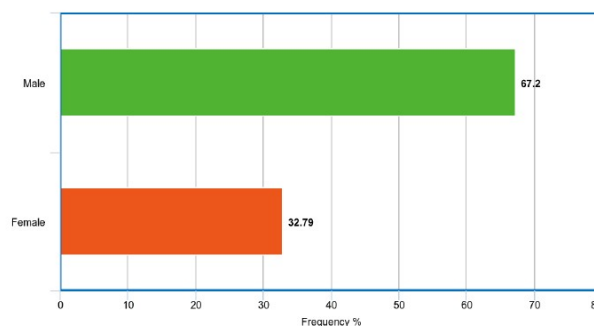


Figure-2

- < 30 years = 11.23%
- 31-40 years = 19.72%
- 41-50 years = 29.35%
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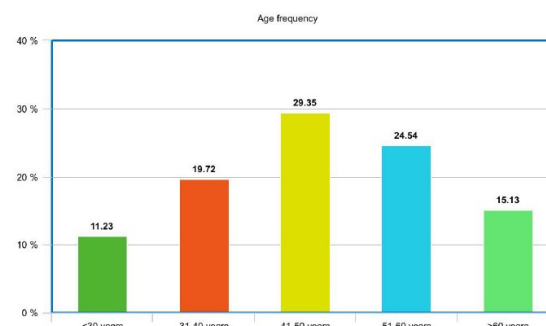


Figure-3

Rural = 35.55%

Urban = 64.44%

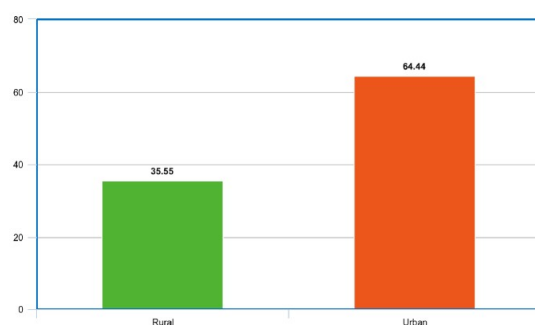


Figure-4

Discussion

A retrospective audit was conducted, of 2994 (100%) patients who were analyzed. While 1177 (39.31%) were diagnosed with liver cirrhosis and out of them 436 patients (14.36%) out of total patient and 37% out of cirrhotic patients had complaint of hematemesis.⁹

In hematemesis patients majority of patients are male (67.20%) while female are less (32.79%).

In term of age group hematemesis is more common in forties from 41-50 years of age (29.35%). And less percentage in patients with age less than 30 years.¹⁰

Area wise distribution suggests more urban patients visit hospital (64.44%) as compared to rural (35.55%).

Hematemesis occur in large number of cirrhotic patients and usually common in males than in females and most frequently occur in age from of 41-50 years.

Esophageal variceal hemorrhage is one of the more dangerous complications of hepatic cirrhosis. Initial treatment can be determine patient mortality and morbidity. But not all hospitals have adequate facilities and medicines to handle it¹¹.

Our results are better than the audit published in India¹².

Most patients bleed from esophageal or gastric varices, but bleeding from ectopic varices or portal hypertensive gastropathy is also possible. We also experiences the same situation in our patients.¹³

Source of bleeding (EV/GV/other 80/119%) in 964 patients comparable with our study.¹⁴

Conclusion: Majority of cirrhotic patients came with hematemesis.

Budget: Nil

Disclaimer: None

Conflict of Interest: None

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References

1. Scheurer U. Hämatemesis. Spital-externer Notfall [Hematemesis. Extramural emergency]. Schweiz Med Wochenschr. 1993 Apr 17;123(15):694-700. German. PMID: 8488372
2. Sakita T, Takasu S, Inui Y. [Hematemesis]. Saishin Igaku. 1968 Sep 10;23(9):1937-44. Japanese. PMID: 5304796
3. Gomes AS, Levin DC, Bettmann MA, Grollman J, Henkin RE, Hessel SJ, Higgins CB, Kelley MJ, Needleman L, Polak JF, Stanford W, Wexler L, Abbott W, Port S. Hematemesis. American College of Radiology. ACR Appropriateness Criteria. Radiology. 2000 Jun;215 Suppl:113-9.
4. Cahuana A, Trías E, Oliva F, Youssef W, Pou J, Vilar P, Varea V. Hematemesis en la infancia. Interés de la fibroscopia en el diagnóstico [Hematemesis in childhood. Use of the fiberscope in diagnosis]. An Esp Pediatr. 1982 Jul;17(1):1-5. Spanish. PMID: 6982641
5. Kaila R, Kannikeswaran N, Kamat D. Hematemesis. Clin Pediatr (Phila). 2010 Nov;49(11):1085-7.
6. An, I. C., & Ahmad, I. K. (2017). Hematemesis Caused by Forgotten Corrective Device. The Journal of the American Osteopathic Association, 117(7), 480. <https://doi.org/10.7556/jaoa.2017.097>
7. Robinson Q. L. (1968). Haematemesis. British Medical Journal, 1(5586), 253.



8. Rienhoff WF Jr. The management of hematemesis. *South Med J.* 1955;48(10):1086-1087.
9. Alsayouf H. (2006). Hematemesis in a neonate. *Clinical Pediatrics*, 45(1), 105-107.
10. Quitadamo, P., Anselmi, F., Mante-gazza, C., Tambucci, R., Campanozzi, A., et al. (2022). Hematemesis in Infants: The First Evidence-Based Score to Predict the Need for Timely Endoscopy. *Pediatric Emergency Care*, 38(5), e1245-e1250.
11. Klahan Y, Alkaff FF. Hematemesis on Hepatic Cirrhosis Patients in Area with Limited Facilities. *Biomolecular and Health Science Journal.* 2018;1(1):58-60.
12. Lavekar A, Vijaykumar TR, Nandeesh HP, Suvarna D, Aradya HV, Reddy R, Anilkumar G. Audit of Clinical Profile and Outcomes of Acute Variceal Bleed in a Tertiary Care Hospital. *Journal of Digestive Endoscopy.* 2019 Jul;10(03):166-71.
13. Biecker E. Gastrointestinal bleeding in cirrhotic patients with portal hypertension. *International Scholarly Research Notices.* 2013;2013(1):541836.
14. Gananandan K, Phillips A, Chikhliya A, Old H, Sim SJ, Thakur N, Hussain I, Kazankov K, Mookerjee RP. Negative impact of the pandemic on hospital admissions, morbidity and early mortality for acute cirrhosis decompensation. *BMJ open gastroenterology.* 2023 Jan 1;10(1):e001071.