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Prospective Study on Upper GI Bleeding

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ABSTRACT

Aims: The aim of this study to evaluate the possible aetiology of bleed & clinical profile of patients

Objectives:

- To assess the causes of the upper gastrointestinal haemorrhage.
- To assess the management of upper gastrointestinal bleeding.
- To review the complications of upper gastrointestinal haemorrhage.

Methodology: A Hospital based prospective study was carried out for 6 months at single center, Warangal, Telangana, India. Patients were enrolled in this study based upon various symptoms and were assessed. Our study was used to define the possible etiology of bleed. All the relevant and necessary data was collected from patient's care notes, Treatment charts Interviewing patient, Interviewing health care professional's patient related information collected and confidentiality maintained.

Results: A total of 200 patients were enrolled in this study in which 11-80 years age using as subjects were enrolled from single centre. According to Gender wise 200 patients were divided 136(68%) males and 64(32%) females. According to Age wise categorization of the study population majority were in the age of 41-60(61%) years followed by age group 21-40 years(35.5%),61-80 years (9.5%) and 0-20 years (8.5 %) respectively. According to symptom wise distribution majority was found to be Hematemesis 106(53%) followed by Melena 77(39%) and both 17(9%) respectively.

Conclusion: In this study we found that Endoscopy can be used as diagnostic as well as therapeutic measures, it is therefore recommended within 24 hours of bleeding.

KEY WORDS: CLD (chronic liver disease), hemorrhagic gastritis, congestive gastropathy, UGIE(upeer gastrointestinal endoscopy).

INTRODUCTION

- Upper gastrointestinal bleeding (UGIB) is a potentially life threatening abdominal emergency that cause of hospitalization.
- Upper GI bleeding (UGIB) is defined as bleeding from a source proximal to the ligament of the ligament of the ligament of Treitz.
- Acute upper gastrointestinal bleeding is characterised by :
  Haematemesis
  Melaena
  Hematochezia.
- Heavy bleeding from the upper GI tract maybe associated with brighter rectal bleeding.
- Bleeding from the upper GI tract is approximately four times as common as bleeding from the lower GI tract.
- Gastrointestinal bleeding in the GI tract, which include the oesophagus, stomach, small intestine.
- Bleeding that originates above the ligament of Treitz usually present either as hematemesis or melena, bleeding that originates below most commonly present as haematochezia
- Most common cause of upper GI bleeding is gastro -oesophageal varices, Common cause of upper GI bleeding helicobacter pylori, Chronic liver disease is the quite often cause of upper GI bleeding. Some medication such as anti coagulants, platelet

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inhibitors, antibiotic, NSAIDS.

- SSRI s are less cause of upper GI bleeding.
- Acute Gastrointestinal bleeds can also lead to shock which is a medical emergency.
- The chronic liver disease is most common cause of portal hypertension.

SYMPTOMS:

- Hematemesis: Vomiting of blood
- Coffee grounds: Results of gastric acid effect on blood
- Malena: Black tarry stool
- Haematochezia: Bright red blood in stools

. **CAUSES OF UPPER GI BLEEDING:**

- Most common cause of upper GI bleeding:
- 1. Duodenal ulcers
- 2. Esophagitis
- 3. Oesophageal varices
- 4. Gastric tumours
- 5. Gastritis
- 6. Gastric ulcers
- 7. Mallory-wise syndrome
- 8. Peptic ulcer

RISK FACTORS OF UPEER GI BLEEDING:

- Age
- Previous history of gastrointestinal bleeding
- Chronic kidney disease
- Cardiovascular disease
- Cirrhosis and portal hypertension
- Helicobacter pylori infection
- Medications
- Gastroesophageal reflux disease
- Gastric acid hypersecretion.

DIAGNOSIS:

- UGIE (upper gastrointestinal endoscopy)

TREATMENT OF UPPER GASTROINTESTINAL BLEEDING:

- Esomeprazole 40 mg PO q24 h
- Lansoprazole 30 mg PO q 24 h
- Pantoprazole 40 mg PO q 24 h
- Cimetidine 37.5 to 50 mg /hr IV (900-1200mg /day)
- Ranitidine 50 mg IV q8 h (or)6.25mg/hr continuous IV infusion (150 mg / day)
- Famotidine 20 mg IV q 12 hr or 10 mg IV initially (40 mg / day)

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- Treatment of oesophageal varices or other lesion caused by portal hypertension
- Octreotide 50 micro gram /hr bolus by a continuous intravenous drip at 50 micro gram/hr
- for 72 hrs.
- Treatment of upper GI bleeding in patient with cirrhosis:
- Ciprofloxacin 400 mg IV q 8h
- Cefepime 2g iv q 12 h
- Erythromycin 250 mg iv once 20minutes prior to endoscopy

METHODOLODGY

Study site:

The Present study was conducted at Vamshi gastro and liver clinic. (Hanmakonda, Warangal and Telangana, India).

Study design:

A hospital based Prospective observational study.

Study-Period:

The study was carried at for period of 6 months (November 2021 - May 2022)

Study-sample size:

The study was conducted on 200 patients single centre.

Study criteria:

- **Inclusion criteria:**
- Patients suffering with gastrointestinal problems.
- Patient with chronic usage of NSAIDS.
- Patient with chronic alcoholic disease.
- Patient with a known history of chronic liver disease.
- A Sedentary life style.
- 1-80years male and female patients.
- **Exclusion criteria:**
- Pregnancy women and Breastfeeding mother.

Study procedure:

- The study was initiated at single centre by selecting the patients based on inclusion criteria of the study. Patient s with age 0-100 age enrolled in our studies who were suffering with upper GI bleeding Patients were enrolled in this study based on Past medical history, Personal history (occupation, life style, locality), Causes (medication ,Diet, Disease),Diagnosis. Our study was used to evaluate the possible aetiology of bleed UGIB, Management of upper gastrointestinal bleeding.
- **Source of Data:** All relevant and necessary data was collected from
- Patient case notes,
- Patients,
- Prescriptions,
- Physicians,
- Laboratory reports,
- Patients care taker,
- **Statistical method:**
- Statistical analysis was performed using Microsoft office excel to determine average number of drugs prescribed per prescription.
- **Data collection form:**

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- A suitable designed data collection form was prepared for patient who include demographic details of patient such as age, gender, address, past medical history, personal history (life style, occupation, locality) causes (diseases, medications, diet) diagnosis, current Medication chart.
- **Informed consent form:**

- A patient inform consent (annexure) form was prepared consist of description of the study the informed consent was obtained from patients who met inclusion criteria and work enrolled in the study

RESULTS

- In 6month period of study a total of 200 patient all aged group were included and were assessed.

GENDER WISE DISTRIBUTION:

S.no	Gender	Number of people
1	Male	136
2	Female	64

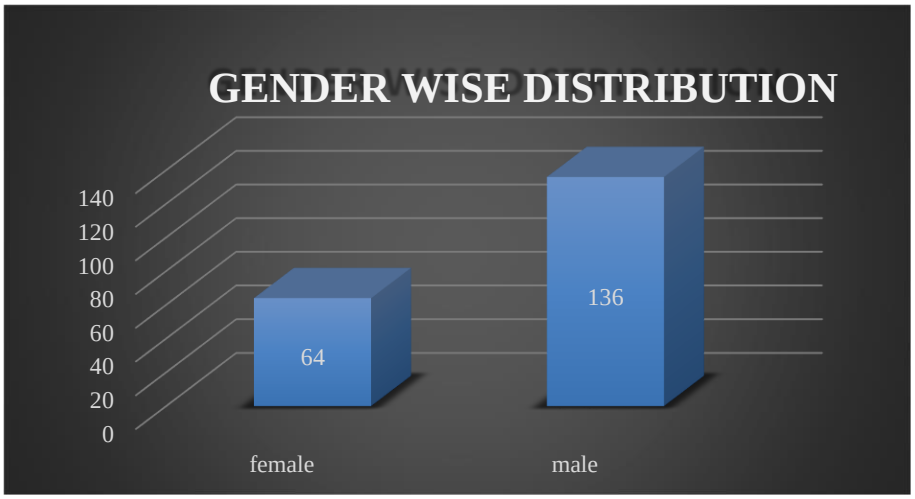

Fig -2 gender wise distribution

Among 200 patient s male were predominance with 136(68%) and 64 (32%) were females.

AGEWISE DISTRIBUTION:

S.no	**Age**	**Male**	**Female**	**Total cases**
1	0-20	5 (2.5%)	**12 (6%)**	**17**
2	21-40	**44 (22%)**	**27(13.5)**	**71**
3	41-60	**74 (37%)**	**18 (9%)**	**92**
4	61-80	**12 (6%)**	**7(3.5%)**	**19**
5	81-100	**1 (0.5%)**	**0(0%)**	**1**

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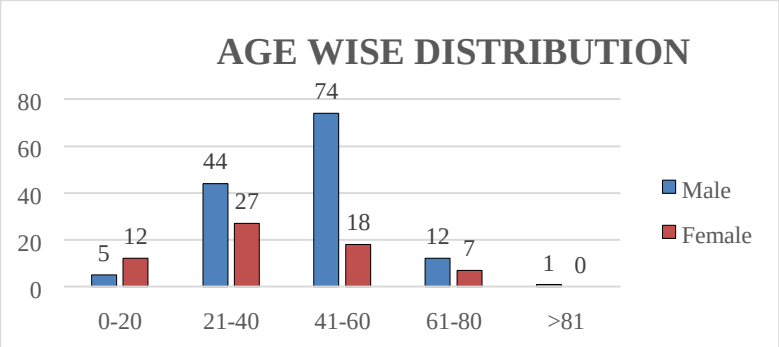

Fig -3 age wise distribution

Among200 patients majority were in the age of 41-60 years (46%) followed by age group 21-40years (35.5 %) and61-80 years (9.5%)o-20years(8.5%)respectively.

SYMPTOMSWISE DISTRIBUTION

S.no	Symptoms	Total cases
1	**Hematemesis**	**106(53%)**
2	**Malena**	**77(38%)**
3	**Both**	**17(9%)**

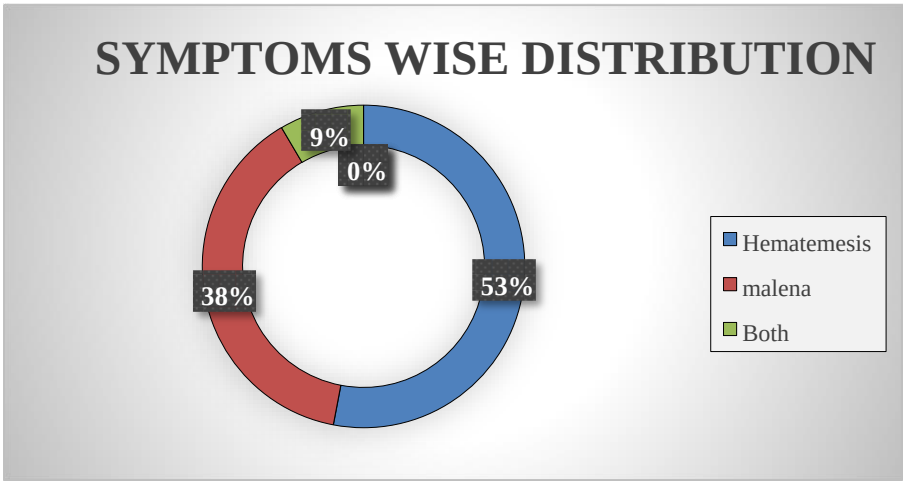

Fig -4 symptoms wise distribution

Among200 patients, majority was found to be hematemesis 106(53%) followed by melena 77 (39%) and both (hematemesis , melena)17 (9%)

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DIAGNOSISWISE DISTRIBUTION:

DIAGNOSIS	NUMBER OF PEOPLE
Varices	53
Ulcers	47
Antral gastritis	16
Hemorrhagic gastritis	14
Esophagitis	34
Erosive gastritis	4
Pan gastritis	7
Duodenitis	5
Congestive gastropathy	2
Corrosive injury	4
Mallory wise syndrome	1
Ulcero proliferative growth	3
Corporal gastritis	3
Necrotic ulceration	2
Fundal gastritis Fundal malignancy	4 1

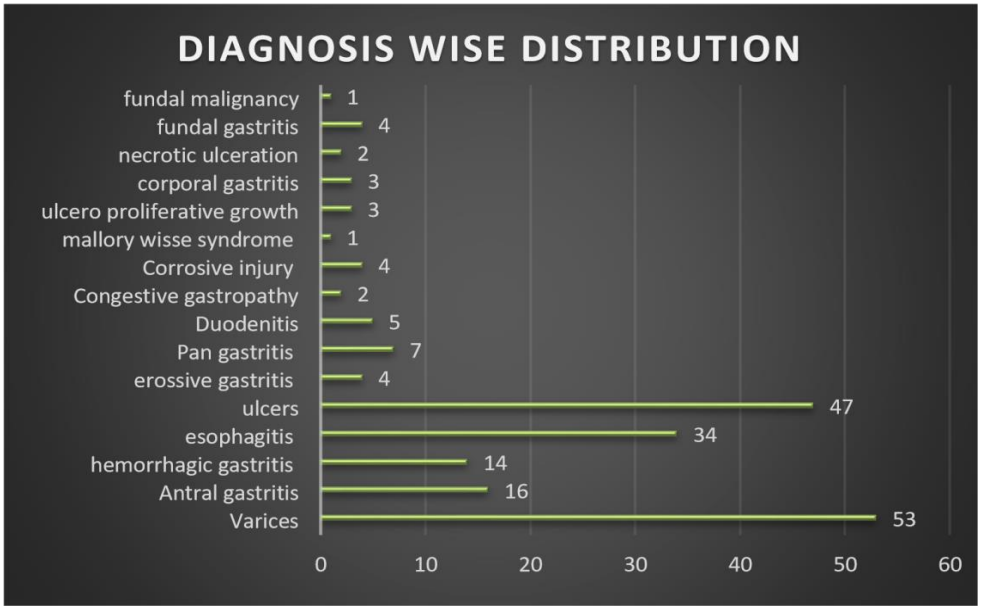

Fig -5 diagnosis wise distribution

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Among 200 patient majority was found to be varices 53(26.5%), followed by ulcer s47(23.5%), esophagitis34(17%), antral gastritis 16(6%), hemorrhagic gastritis 14(7%), pan gastritis 7(3.5%), duodenitis 5(2.5%), fundal gastritis4(2%), corrosive injury 4(2%), ulceroproliforative growth 3(1.5%), erosive gastritis 4(2%), corporal gastritis 3 (1.5%), congestive gastropathy 2(1%), necrotic ulceration 2(1%), fundal gastritis1(0.5%), Mallory wise syndrome 1(0.5%).

OCCUPATIONWISE DIDTRIBUTION:

OCCUPATION	NUMBEROF PEOPLE
Driver	13
Labour	30
Farmer	35
Homemaker	40
Student	20
Software	22
None	40

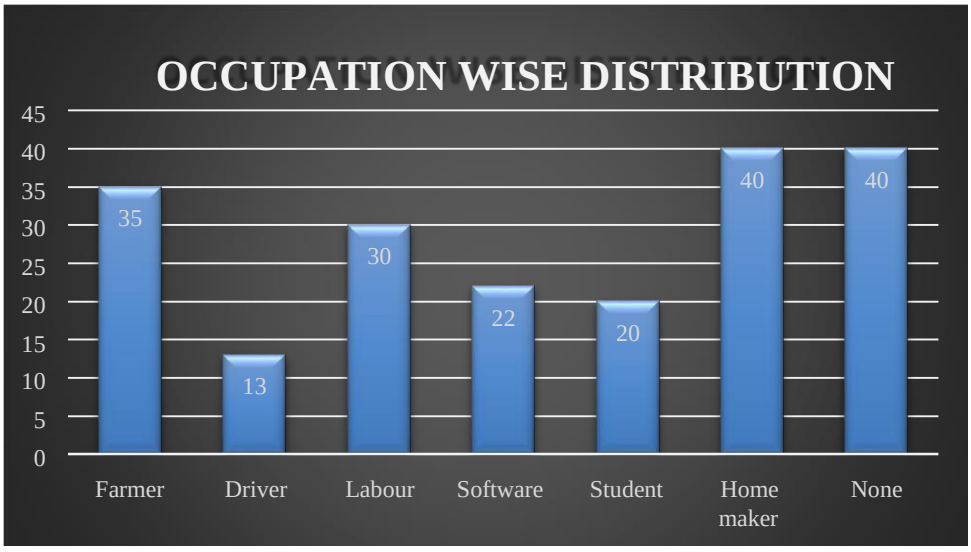

Fig -6 occupation wise distribution

Among200 patients 40 patients were home makers (20%), followed by none 40 (20%) , farmer 35 (17.5%),labour 30(15%),software 22(11%),students 20 (10%), and driver 13(6.5%)respectively.

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LIFESTYLE WISE DISTRIBUTION:

Lifestyle	Number of people
Alcoholic	98
Smoker	6
Both	13
Tobacco	1
None	82

Fig -7 lifestyle wise distribution

Among200 patient majority was found to be alcoholic 98(49%) followed by smoker 6 3%), both (alcoholic and smoker)13 (6.5%), tobacco 1(0.5%) and none 82(41.5%).

LOCALITYWISE DISTRIBUTION:

Locality	Number of people
Urban	115
Rural	85

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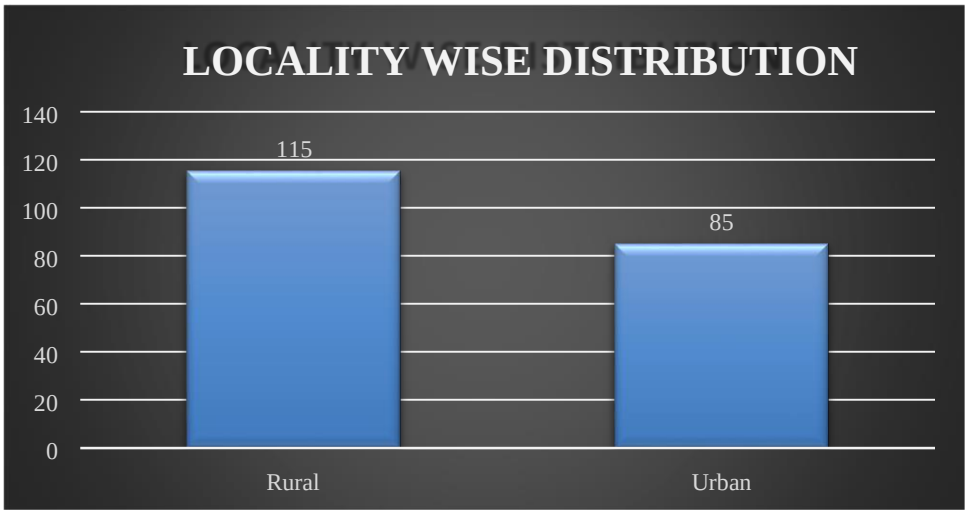

Fig -8 locality wise distribution

Among200 patients 115 patients belong s to rural area (57.5%) followed by 85 patients belongs to urban area (42.5%).

CAUSEWISE DISTRIBUTION:

CAUSE	NUMBER OF PEOPLE
ALD	6
CLD	6
ALD-CLD	11
Medication	16
Diet	72
Ingestion of acid and Ingestion of foreign	4 1
None	84

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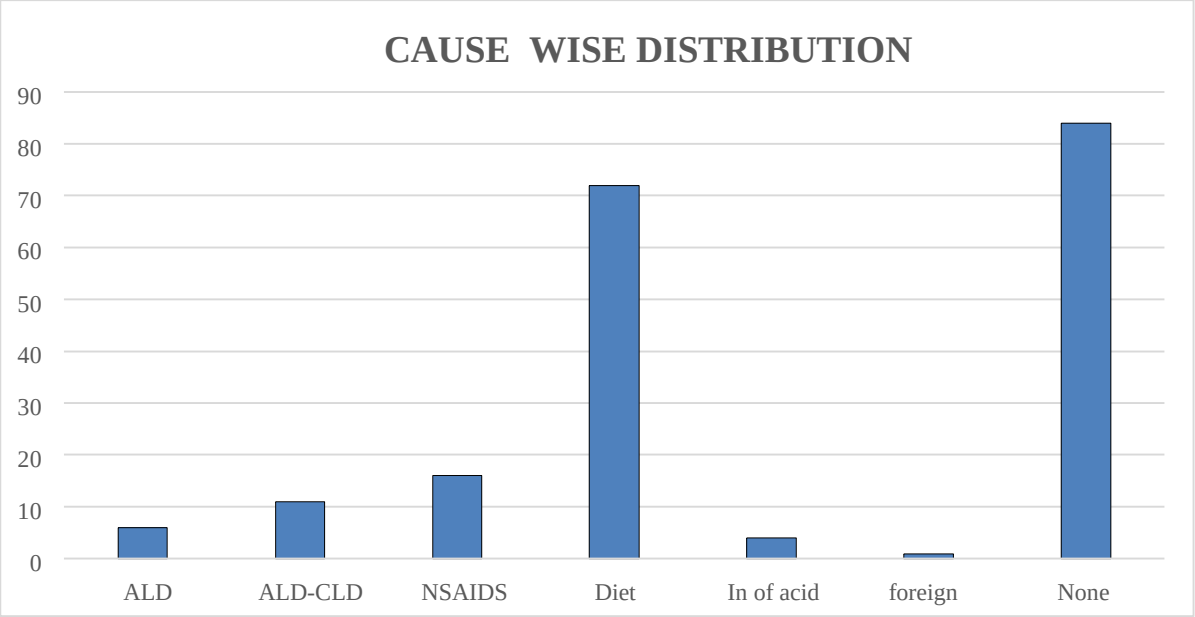

Among 200 patient most of the patients with unknown cause were 84 (42%) followed by diet 72(36%) NSAIDS 16 (8%), ALD - CLD 11(5.5%), ALD6(3%), CLD 6(3%), Ingestion of acid 4(2%) ingestion of foreign particle 1(0.5%).

DISCUSSION

The patient study was designed to study the prospective study on upper GI bleed. Upper gastrointestinal bleed may be various causes that include varices , ulcers, growth, tears in the oesophagus etc. in the gastrointestinal tract.

In this study a hospital study of 200 patients with upper GI bleed of all ages using subjects were enrolled from a single centre.

Our study shows male predominance with 136 patients (68%) and female with 64(32%).

This results depicts that male are more prone to gastrointestinal disorder.

Our study found that incidence of gastric malignancy was higher as compared toother studies, which may be due to major risk factors in the study population such as smoking and alcohol.

Among 200 patients 98 patients were alcoholic which gaze attention towards patient risk and 13 number of patients with a habit of both (alcoholic and smoker)

As per the study conducted by brintha K. Enestvedtet al (16).The most common presenting complaint was hematemesis (43.15%) followed by melena.

In our study the most common presenting complaints were hematemesis in 106 cases followed by melena in 77 (39%) and in both (9%).

In our study most common gastrointestinal finding were various accounting for 33.5% followed by gastric ulcers (16%), esophagitis (14%), antral gastritis (12%), hemorrhagic gastritis (9%), erosive gastritis (4%), pan gastritis (4%), duodenitis (4%), congestive gastropathy (4%), corrosive gastritis (1%), corrosive injury (2%), Mallory wise syndrome (0.5) respectively.

In our study the incidence of gastritis was 12%which is comparable to other studies done by sarwaret al (17) and zia Uddin (13) found to be 13% and 18%respectively.

The majority of cases were due to variceal bleed (33.5%) which may be due to alcohol intake and liver disease in the study group.

Our study found that incidence of variceal bleed was higher as compared to the other studies, which may be due to major risk factorsin the study population such as smoking and alcohol.

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