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Clinical Profile of Upper Gastrointestinal Endoscopy Patients in a Tertiary Healthcare Facility: Cross-Sectional Research

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ABSTRACT

Introduction: Upper gastro-intestinal haemorrhage is a common and potentially life-threatening gastrointestinal emergency with a wide range of clinical severity, ranging from insignificant bleeds to catastrophic exsanguinating haemorrhage, described as haemorrhage derived from a source proximal to the Treitz ligament.

Objectives: Clinical profile of upper gastrointestinal endoscopy patients in a tertiary healthcare facility.

Methods: This was a cross-sectional analysis carried out over two years at a tertiary health care centre with an Upper Gastro-Intestinal Endoscopy clinic. There were 252 patients referred for the procedure during this time. Upper gastrointestinal endoscopy with all aseptic precautions and normal procedures, all patients underwent USG after written and clarified consent, were entered into excel sheets and analyzed by SSPSS (Statistical Package for Social Sciences).

Results: In our study, we found that patients had a mean age of 11.42 ± 6.22 years. The range was from 1-60 Yrs. The majority of patients were females or 52 per cent, and 48 per cent were males. Hematemesis under investigation was the most common provisional diagnosis - 22 %, followed by mass per abdomen at 16 %. In 25 % of cases, the most common USG findings were Coarse Ecotexture of Hepatic followed in 18 % by Diffuse Parenchymal Hepatic.

Conclusion: From our study, it can be concluded that Hematemesis under study followed by Mass per abdomen was the most common provisional diagnosis. Coarse Ecotexture of Hepatic accompanied by Diffuse Parenchymal Hepatic modifications were the most common USG findings.

Key Words: Upper gastrointestinal endoscopy, Upper gastro-intestinal haemorrhage, USG-Abdomen

INTRODUCTION

Upper gastrointestinal haemorrhage is a common and potentially life-threatening gastrointestinal emergency, described as a haemorrhage derived from a source proximal to the Treitz ligament, with a broad range of clinical severity, ranging from insignificant bleeds to catastrophic exsanguinating haemorrhage, and is associated with significant morbidity and mortality.[1,2] The frequency of upper gastrointestinal bleeding varies from a population of 50 to 150/100,000 each year and time trend analyses indicate that aged people represent a growing proportion of those with acute upper gastrointestinal bleeding. As many as 70% of acute upper gastrointestinal bleeding episodes occur in patients older than 60 years, and the incidence is likely to increase with age due to the increased intake in elderly patients of non-steroidal anti-inflammatory drugs (NSAIDs), which trigger ulcerogenic.[3,4] Approximately two-thirds of all patients who have gastrointestinal bleeding in the emergency department have upper gastrointestinal bleeding as the trigger. As both have different treatment procedures and prognosis, patients can be divided as having either variceal or non-variceal causes of upper gastrointestinal haemorrhage.[5] The first involves lesions due to portal hypertension, including gastroesophageal varices and portal hypertensive gastropathy; the second includes lesions found in the general population (peptic ulcer, erosive gastritis, esophagitis of reflux, Mallory-Weiss syndrome, tumours, etc.)[6]

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MATERIALS AND METHODS

This was a cross-sectional analysis carried out over two years at the tertiary health care centre referred for Upper gastro-intestinal Endoscopy. 256 patients were referred for the procedure during this time. They were subjected to upper gastro-intestinal endoscopy with all aseptic precautions and normal procedures after written and explained consent. Both patients underwent USG & the findings were entered and evaluated by SPSS in excel sheets (Statistical Package for Social Sciences).

RESULTS

The patients had a mean age of 11.42 ± 6.22 years. The range was from 1-60 Yrs. (The Min-Max)

Table 1: Patient allocation according to age

Age	Mean ± SD
Average age (Yrs.)	11.42 ± 6.22
Range (Yrs.)	1-60

The majority of the patients were 52 % female and 48 % male.

Table 2: Patient allocation as per sex

Sex	No.	%age (%)
Male	122	48%
Female	130	52%
Total	252	100.00

Hematemesis under investigation was the most common provisional diagnosis (56), accompanied by abdominal mass (40), foreign body (34), vomiting under investigation (28), fever under investigation (26), ascitis under investigation (22), cirrhosis with hypertension portal (14), upper gastrointestinal obstruction (12), dysphagia under investigation (12) and malena under investigation (12) (8).

Table 3: Distribution of the patients as per the Provisional diagnosis

Provisional diagnosis	No.	%age (%)
Haematemesis under investigation	56	22%
Mass per abdomen	40	16%
Foreign body	34	13%
Vomiting under investigation	28	11%
Fever under investigation	26	10%
Ascitis under investigation	22	9%
Cirrhosis with portal Hypertension	14	6%
Upper gastro-intestinal obstruction	12	5%
Dysphagia under investigation	12	5%
Malena under investigation	8	3%
Total	252	100%

Coarse echotexture of the liver (64), diffuse liver parenchyma (46), dilated portal vein with splenomegaly (26), dilated portal vein with per fibrosis, massive splenomegaly (24), hepatitis with splenomegaly (22), hepatomegaly with cirrhosis of the liver with splenomegaly (14), hepatomegaly with thickening of the gall bladder with massive ascites (12), hepatomegaly with coarse echotechymia (14), hepatomegaly with thickening of the gall bladder with massive ascites (12), hepatomegaly with coarse echotechymia (12) were the most common USG findings.

Table 4: Distribution of the patients as per the sonography findings

USG findings	No.	%age (%)
Coarse Hepatic Ecotexture	64	25%
Diffuse Hepatic Parenchyma	46	18%
Dilated portal vein + Splenomegaly	26	10%
Dilated portal vein + perifibrosis + massive splenomegaly	24	10%
Hepatitis + splenomegaly	22	8%
Hepatomegaly + cirrhosis + splenomegaly	14	6%
Hepatomegaly + thickenend gall bladder + Massive Ascitis	12	5%
Hepatomegaly + massive ascitis + Grade I nephropathy	10	4%
Hepatomegaly + ascites	8	3%
Mild spelenomegaly + paraaortic Lymphadenopathy	8	3%
Dilated stomach & duodenum + duodenal Obstruction	6	2%
Splenomegaly + Bulky Pancreas	4	2%
Ovarian Cyst	4	2%
Renal calculi	4	2%
Total	252	100

DISCUSSION

A common reason for doctor consultations and hospital admissions is gastrointestinal haemorrhage.[7-9] Endoscopy has been identified as the first-line diagnostic tool in upper Gastro-intestinal haemorrhage, and many therapeutic modalities have been created. Nuclear scintigraphy, mesenteric angiography and colonoscopy are methods of diagnosing lower Gastro-intestinal haemorrhage, however, a single standard

procedure has not been developed since each has inherent advantages and disadvantages.[10-11] In the diagnosis of inflammatory bowel disease, ischaemic colitis, bacterial colitis and malignant bowel tumours, and other bowel diseases, the sono-morphological presence of bowel wall thickening in patients with acute or chronic gut disorders has recently been assessed for its importance.[12] A non-invasive and repeatable imaging analysis that can be done effectively without bowel planning is trans-abdominal ultrasonography.[13-15] In our analysis we have shown the average age of the patients was 11.42 ± 6.22 Yrs. The range was from 1-60 Yrs. (The Min-Max). The majority of the patients were 52 % female and 48 %, male. Hematemesis under investigation was the most common provisional diagnosis (22 %), followed by mass per abdomen (16 %), foreign body (13 %), vomiting under investigation (11 %), fever under investigation (10 %), ascites under investigation (9 %), hypertension portal cirrhosis (6 %), upper gastrointestinal obstruction (5 %), dysphagia and dysphagia (3 %). Coarse liver eco texture (25 %), diffuse liver parenchyma (18 %), dilated portal vein with splenomegaly (10 %), dilated portal vein with per fibrosis, massive splenomegaly (10 %), hepatitis with splenomegaly (9 %), hepatomegaly with splenomegaly liver cirrhosis (6 %), hepatomegaly with splenomegaly (6 %), hepatomegaly with M gall bladder thickening(2 %), were the most common USG findings.

CONCLUSION

From our study, it can be concluded that Hematemesis under study followed by Mass per abdomen was the most common provisional diagnosis. Coarse Ecotexture of Hepatic accompanied by Diffuse Parenchymal Hepatic modifications were the most common USG findings. For diagnosis and treatment of patients, this sonographic examination along with clinical results is useful. Aggressive public education and close monitoring of patients who are found to have alcohol-related liver disorders are recommended. If life expectancy rises, caution should be taken for older adults and patients with comorbid conditions, leading to high mortality from GI bleeding.

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