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Acute Upper Gastrointestinal Bleeding in Elderly versus Younger Egyptian Patients: Clinico-Endoscopic Profiles and Outcomes

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ABSTRACT

Background: Acute upper gastrointestinal bleeding (UGIB) carries substantial morbidity and mortality, particularly in older adults with multimorbidity.

Objectives: To compare clinico-endoscopic features and outcomes of UGIB in elderly (≥60 years) versus younger (<60 years) Egyptian patients.

Patients and Methods: In a prospective study at Mansoura University Hospital (October 2023–October 2024), 275 adults with acute UGIB were enrolled: 178 elderly and 97 younger. All underwent clinical evaluation, laboratory testing, abdominal ultrasonography, and urgent upper endoscopy within 24 hours. Endoscopic findings were classified by Westaby, Sarin, and Forrest systems; risk was stratified using the Rockall score. Outcomes included rebleeding, ICU admission, hospital stay, and in-hospital mortality.

Results: Baseline demographics and presenting symptoms were similar between groups. Elderly patients had lower platelet counts, higher INR, higher AST, lower albumin, and higher creatinine, and more liver and cardiac comorbidities (all significant). Variceal bleeding predominated in the elderly (58.4% vs. 40.2%; p=0.038), whereas non-variceal bleeding—especially peptic ulcer disease—was more frequent in younger patients (38.1% vs. 22.5%; p=0.025). Rockall scores were higher in the elderly (mean 3.96 vs. 2.40; p=0.001). Mortality was markedly greater among elderly patients (14.0% vs. 2.1%; p=0.001); differences in rebleeding and ICU admission were not statistically significant.

Conclusion: Elderly patients with acute UGIB had a higher prevalence of variceal bleeding, greater comorbidity burden, and significantly higher mortality compared with younger patients. Age is therefore a key prognostic factor, underscoring the need for early risk stratification and tailored management strategies in this vulnerable population.

Keywords: Upper gastrointestinal bleeding - Elderly patients - Variceal bleeding - Peptic ulcer disease - Rockall score

INTRODUCTION

Acute upper gastrointestinal bleeding (UGIB) is a potentially fatal medical emergency accompanied by substantial morbidity and mortality worldwide. It is defined as bleeding originating proximal to the ligament of Treitz and usually presents with hematemesis, coffee-ground vomiting, melena, or, less commonly, hematochezia in cases of massive hemorrhage [1]. According to estimates, there are between 50 and 150 cases of UGIB per 100,000 people each year, with a reported mortality rate of 5–10% despite advances in endoscopic and pharmacologic therapy. Notably, UGIB occurs more frequently in the elderly population, who are at increased risk due to comorbidities and medication use [2,3].

The etiology of UGIB varies by geographic region, age group, and underlying comorbidities. In Western countries, peptic ulcer disease (PUD) remains the predominant cause, followed by erosive gastroduodenal lesions and variceal bleeding. In contrast, in Egypt and other developing countries with a high prevalence of chronic liver disease (CLD), bleeding esophageal varices represent the main cause of UGIB [4].

Older adults with UGIB generally present with different clinical characteristics compared to younger cases. They are more likely to have comorbid conditions such as cardiovascular, renal, and hepatic disease, and may frequently be exposed to ulcerogenic medications including non-steroidal anti-inflammatory drugs (NSAIDs), antiplatelets, and anticoagulants. These factors contribute to differences in etiology and outcomes between age groups [5].

Several studies have demonstrated age-related differences in the etiology of acute UGIB. Variceal bleeding is more frequently observed in younger populations, whereas peptic ulcer disease (PUD) tends to predominate among elderly patients [6]. In Egypt, the ongoing demographic transition with a continuous expanding elderly population underscores the importance of characterizing age-specific clinico-endoscopic profiles of UGIB. **Hossam *et al.*** reported that PUD was the leading cause of bleeding in elderly Egyptians, while variceal hemorrhage was significantly more common among younger cohorts. Moreover, mortality and complication rates were markedly higher in elderly patients, highlighting the prognostic significance of age in UGIB outcomes [7]. Consistent with these findings, **Elsebaey *et al.*** demonstrated that in a cohort of elderly Egyptian cases, in-hospital mortality reached 8.7%, with predictors including shock on admission, comorbidities, and variceal bleeding [8].

Despite the availability of several international studies, data comparing younger and elderly Egyptian patients with UGIB remain limited. Characterizing the

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clinico-endoscopic profile and outcomes in different age groups is essential for guiding risk stratification, optimizing therapeutic strategies, and improving prognosis. Therefore, our study aimed to assess acute UGIB in Egyptian elderly versus younger patients, with emphasis on clinical presentation, endoscopic findings, and outcomes.

PATIENTS AND METHODS

This prospective observational study was conducted in the endoscopy units of the Internal Medicine Department, Mansoura University Hospitals, Egypt, from October 2023 to October 2024. Patients were recruited consecutively from the Emergency Department and Intensive Care Unit (ICU).

Eligible patients included adults aged >18 years presenting with clinical manifestations of acute UGIB, defined as hematemesis (including "coffee-ground" vomiting), melena, or hematochezia with or without hypotension. Elderly patients were defined as those ≥60 years, whereas younger patients were defined as <60 years. Patients with absolute contraindications to upper gastrointestinal endoscopy (toxic megacolon in unstable patients, peritonitis, or bowel perforation), severe hematological abnormalities (neutropenia, coagulopathy, thrombocytopenia, or impaired platelet function), conditions increasing perforation risk (abdominal or iliac aortic aneurysm, recent bowel surgery, bowel obstruction, or connective tissue disorders), or unwillingness to participate were excluded. Based on age, patients were categorized into two groups: Group A (younger patients, <60 years) and Group B (elderly patients, ≥60 years).

All included patients underwent standardized assessment beginning with detailed history taking, including demographic data, UGIB presentation, comorbidities (such as diabetes, hypertension, CLD, renal disease, cardiovascular diseases, schistosomiasis, or malignancy), and medication history (NSAIDs, antiplatelets, anticoagulants).

Clinical examination emphasized vital signs and abdominal findings, particularly hepatomegaly, splenomegaly, ascites, or features of chronic liver disease. Laboratory investigations included complete blood count, liver function tests (AST, ALT, serum albumin, bilirubin, prothrombin time), renal function tests (BUN, creatinine, electrolytes), and viral hepatitis markers (HBsAg, HBcAb, HCV Ab). Abdominal ultrasonography was performed to evaluate cirrhosis, splenomegaly, and ascites, correlating radiological findings with clinical and endoscopic data. Additional investigations, such as chest X-ray and ECG, were requested when clinically indicated.

Pre-endoscopic management included prompt evaluation and resuscitation with intravenous fluids, proton pump inhibitors (PPIs), prokinetics, supplemental oxygen, correction of coagulopathy, and blood transfusion when required. Patients were kept nil per os (NPO), and Foley catheterization was used in cases of shock, oliguria, acute renal impairment, or massive bleeding. Endotracheal intubation was performed for patients with severe hematemesis, shock, respiratory compromise, or altered mental status. Red blood cell transfusion was administered when hemoglobin levels fell below 8 g/dL. Empirical pharmacological therapy was initiated according to suspected etiology: octreotide infusion for suspected variceal bleeding, high-dose intravenous pantoprazole for suspected peptic ulcer bleeding, and ceftriaxone prophylaxis for patients with variceal bleeding.

Emergency esophagogastroduodenoscopy (EGD) was performed within 24 hours of presentation once hemodynamic stabilization was achieved. Sedation was achieved using propofol and midazolam, and procedures were performed with standard high-definition video endoscopes (FujiFilm BL-7000, Pentax EG-3870, or Olympus CV 180).

Endoscopic evaluation included grading of esophageal varices according to Westaby's classification, gastroesophageal varices according to Sarin's classification, and peptic ulcer bleeding according to Forrest's classification. Prognostic risk was assessed using the Rockall score in cases with non-variceal bleeding. Endoscopic therapy included heater probe coagulation, argon plasma coagulation, or hemoclip for high-risk ulcer bleeding; cyanoacrylate injection for gastric varices; and endoscopic variceal ligation for esophageal varices. Clinical outcomes were monitored for up to 5 days after the initial intervention and included rebleeding, need for repeat endoscopy or surgery, transfusion requirements, length of hospital stay, and in-hospital mortality.

Rebleeding was defined as the recurrence of overt gastrointestinal bleeding, manifested by hematemesis or melena, accompanied by a reduction in hemoglobin of at least two g/dL or the development of hemodynamic instability after initial hemostasis, with confirmation by repeat endoscopy when feasible [7].

Ethical considerations

The study was approved by the Institutional Research Board of the Faculty of Medicine, Mansoura University (Code No. MSc/23.10.2595). Written informed consent was obtained from all patients prior to participation. The consent form clearly stated their agreement to participate in the study and to allow publication of the anonymized data, with full assurance of confidentiality and privacy protection. All procedures were conducted in accordance with the ethical principles outlined in the

Code of Ethics of the World Medical Association (Declaration of Helsinki) for research involving human subjects.

Statistical Analyses

Qualitative data were summarized as frequencies (N) and percentages (%), while quantitative data were initially tested for normality using the Shapiro–Wilk test, with distributions considered normal when $p > 0.05$. Outliers were assessed by visual inspection of boxplots. Normally distributed quantitative variables were presented as mean±SD, whereas non-normally distributed variables were expressed as median and interquartile range (IQR; 25^{th}–75^{th} percentiles). For comparisons of qualitative data, the Chi-square test was applied when all expected cell counts were ≥ 5, and Fisher's exact test (for 2 × 2 tables) was used when expected counts were < 5. Quantitative data were compared between two groups using the independent-samples *t*-test for normally distributed variables and Mann-Whitney U test for non-normally distributed variables. A *p*-value ≤ 0.05 was considered statistically significant for all tests.

RESULTS

Our study included a total of 275 Egyptian patients with acute UGIB at Mansoura University Hospital, Egypt. Patients were classified into two groups: 178 elderly patients aged ≥60 years (Group B) and 97 younger patients aged <60 years (Group A). There were no significant differences between both groups regarding sex distribution, admission site, or clinical presentation. Males predominated in both groups (67% in Group A vs. 74.2% in Group B), but the difference wasn't significant. Clinical presentation patterns were similar, with hematemesis, melena, and combined hematemesis plus melena being the most frequent manifestations, while shock with bleeding was uncommon in both groups. Regarding drug history, NSAID use was higher in younger patients (23.7% vs. 12.9%), showing a trend toward significance but not reaching the conventional threshold. Overall, the two age groups were comparable in their baseline sociodemographic and clinical characteristics, minimizing the likelihood of confounding in subsequent analyses of outcomes (Table 1).

Table 1. Comparison between the 2 age groups as regards sociodemographics and drug history

	Age (years)		χ^2	P value
	<60 group A N=97	≥60 group B N=178		
Sex Male Female	 65 (67%) 32 (33%)	 132 (74.2%) 46 (25.8%)	1.58	0.21
Admission site Gastroenterology out-patient clinics Emergency Admission	 1 (1%) 96 (99%)	 5 (2.8%) 173 (97.2%)	0.93	0.71
Clinical presentation Hematemesis Melena Hematemesis +melena Shock with bleeding	 29 (29.9%) 18 (18.6%) 48 (49.5%) 2 (2%)	 50 (28%) 42 (23.65%) 83 (46.65%) 3 (1.7%)	0.94	0.47
Medication history PPIS NSAID Antiplatelet Anticoagulant	 7 (7.2%) 23 (23.7%) 5 (5.2%) 5 (5.2%)	 20 (11.2%) 23 (12.9%) 14 (7.9%) 12 (6.7%)	 1.15 5.25 0.72 0.27	 0.28 0.09 0.39 0.62

N: number, χ^2: Chi-Square test, PPI: Proton Pump Inhibitor, NSAID: Non-Steroidal Anti-Inflammatory Drug.

No significant differences were noticed in baseline vital signs or hemoglobin levels between the two groups. However, several laboratory parameters were significantly altered in elderly patients, including lower platelet counts, higher INR, elevated AST, reduced serum albumin, and higher serum creatinine, reflecting a greater burden of hepatic and renal dysfunction. Regarding comorbidities, elderly patients had a significantly higher prevalence of liver disease (75.8% vs. 61.9%) and cardiac disease (42.1% vs. 24.7%) compared with younger patients.

Taken together, the most significant finding is that elderly patients presented with worse hepatic, renal, and coagulation profiles, in addition to a higher burden of comorbidities, which may contribute to their increased risk of adverse outcomes (Table 2).

Table (2): Comparison of clinical characteristics, laboratory findings, and comorbidities between the two age groups.

	Age (years)		t/z	P value
	<60 Group A N=97	≥60 Group B N=178		
Systolic blood pressure (mmHg) mean±SD	114.95±20.72	117.50±21.93	0.940	0.348
Diastolic blood pressure (mmHg), mean±SD	69.85±12.12	70.55±11.70	0.391	0.696
Heart rate (beats/min) mean±SD	81.43±12.87	81.28±14.49	0.083	0.934
Respiratory rate (/min) mean±SD	19.39±4.07	20.18±6.88	1.04	0.301
Temperature (Degree cent) mean±SD	37.07±0.45	37.12±0.48	0.823	0.411
Hemoglobin (g/dL) mean±SD	8.85±2.73	8.34±2.02	1.73	0.085
White blood count (th./cmm) mean±SD	8.21±4.95	8.79±5.29	1.0	0.316
Platelets (th./cmm), mean±SD	199.65±114.19	158.92±107.92	3.04	0.002*
INR, mean±SD	1.21±0.27	1.35±0.59	2.05	0.04*
Serum Na (mmol/L) mean±SD	137.53±4.45	136.23±6.62	0.924	0.358
AST (U /dl), mean±SD	38.02±4.92	53.66±5.82	2.55	0.01*
ALT (U /dl), mean±SD	25.33±1.76	36.38±6.52	1.56	0.118
Serum albumin (g/dl) mean±SD	3.28±0.82	3.24±0.40	2.66	0.008*
Serum creatinine(mg/dL) mean±SD	1.29±0.23	1.60±0.35	3.27	0.001*
Bilirubin (mg/dl), mean±SD	0.85±0.23	1.44±0.21	0.880	0.379
Comorbidities:				
Liver disease	60 (61.9)	135 (75.8)	5.96	0.015*
Renal disease	8 (8.2)	22 (12.4)	1.09	0.296
DM	28 (28.9)	63 (35.4)	1.21	0.272
Hypertension	27 (27.8)	53 (29.8)	0.115	0.734
Cardiac disease	24 (24.7)	75 (42.1)	8.24	0.004*
Peptic ulcer	4 (4.1)	6 (3.4)	0.102	0.750
Bilharziasis	9 (9.3)	17 (9.6)	0.005	0.941
Previous GIT bleeding	5 (5.2)	6 (3.4)	0.520	0.471
Previous operations	35 (36.1)	74 (41.6)	0.791	0.374

N: number, SD: Standard Deviation, /min: per minute, th./cmm: thousand per cubic millimeter, INR: International Normalized Ratio, U/L: Units per liter, ALT: Alanine Aminotransferase, AST: Aspartate Aminotransferase, Na: Sodium, DM: Diabetes Mellitus, GIT: Gastrointestinal Tract, *: Significant P-value.

Variceal bleeding was significantly more prevalent among elderly patients compared with younger counterparts (58.4% vs. 40.2%), with gastroesophageal varices occurring more frequently in the elderly group, although without statistical significance (10.1% vs. 4.1%). In contrast, non-variceal bleeding sources were more common among younger patients (38.1% vs. 22.5%), with peptic ulcer disease emerging as the predominant etiology. These findings emphasize a distinct age-related pattern, whereby variceal bleeding predominates in older patients, while peptic ulcer–related bleeding is more characteristic of younger individuals (Table 3).

Table (3): Comparing causes of bleeding between the two age groups.

		N (%)		P value
		<60 group A	≥60 group B	
Variceal	Esophageal	39 (40.2)	104 (58.4)	0.038*
	Gastric	9 (9.3)	9 (5.1)	0.176
	Gastroesophageal	4 (4.1)	18 (10.1)	0.08
Non-variceal	Peptic ulcer	37 (38.1)	40 (22.5)	0.025*
	Gastritis and duodenitis	6 (6.1)	7 (3.9)	
	Mallory –Weiss tear	3 (3.1)	0	
	Malignancy	2 (2.1)	0	

N: number, *: Significant P-value.

No significant differences were noticed between the two age groups regarding Westaby, Forrest, or Sarin classifications, indicating a comparable distribution of endoscopic findings. However, the Rockall score was significantly higher among elderly patients, both in terms of median (4 vs. 2) and mean values (3.96 ± 2.35 vs. 2.40 ± 1.82). This highlights that older patients presented with a substantially higher risk profile, predisposing them to poorer outcomes following acute UGIB (Table 4).

Table 4: Comparing classification scores between the two age groups.

	N (%)		χ^2/z/t	P value
	<60 Group A	≥60 Group B		
Westaby classification	**N=44**	**N=104**		
I	7 (15.9)	24 (23.1)		
II	19 (43.2)	42 (40.4)	0.973	0.615
III	18 (40.9)	38 (36.5)		
Forrest classification for ulcers	**N=43**	**N=47**		
IA	0 (0.0)	2 (4.2)		
IB	3 (7.0)	2 (4.2)		
IIA	3 (7.0)	0	4.82	0.438
IIB	0	5 (10.6)		
IIC	0	6 (12,8)		
III	37 (86.0)	32 (68.1)		
Sarin classification	**N=13**	**N=27**		
Isolated gastric type 1	5 (38.5)	5 (18.5)		
Isolated gastric type 2	4 (30.8)	4 (14.8)	4.68	0.197
Gastro-esophageal type 1	2 (15.4)	11 (40.7)		
Gastro-esophageal type 2	2 (15.4)	7 (25.9)		
Rockall score (median (min-max))	2 (0-6)	4 (1-11)	3.65	0.001*
Rockall score (mean±SD)	2.4±1.82	3.96±2.35	3.65	0.001*

N: number, %: percentage, χ^2: Chi-Square test, SD: Standard Deviation, *: Significant P-value.

Mortality emerged as the most significant adverse outcome, being markedly higher among elderly patients compared with younger ones (14% vs. 2.1%). Although rebleeding episodes and ICU admissions were more frequent in the elderly group (43.3% vs. 32.0% and 15.7% vs. 8.2%, respectively), these differences didn't reach statistical significance. Duration of ICU stay and overall hospital stay were comparable between the two groups. Collectively, these results highlight advanced age as an essential predictor of mortality in cases presenting with acute UGIB (Table 5).

Table (5): Comparing outcome between the two age groups

	Age (years)		χ^2	P value
	<60 Group A N=97	≥60 Group B N=178		
	N (%)	N (%)		
Rebleeding attack	31 (32.0)	77 (43.3)	3.36	0.07
ICU admission	8 (8.2)	28 (15.7)	3.09	0.08
ICU duration (days) Median (min-max)	7 (3-7)	3 (1-7)	1.34	0.179
Mortality	2 (2.1)	25 (14)	10.18	0.001*
Duration of hospital stay (days) mean±SD	4.33±1.96	4.52±1.85	0.786	0.432

N: number, ICU: Intensive Care Unit, χ^2: Chi-Square test, SD: Standard Deviation, *: Significant P-value.

DISCUSSION

Acute UGIB remains a common, fatal emergency, with a recorded mortality rate ranging between 2–10%. It requires prompt hospital admission for diagnosis and management, and early recognition of risk factors accompanied by in-hospital morbidity and mortality is crucial to improving outcomes [9]. Elderly patients are particularly vulnerable because of multiple comorbidities and frequent exposure to ulcerogenic and anticoagulant medications, including NSAIDs, antiplatelets, and anticoagulants. Consequently, UGIB in this population represents a significant clinical challenge, being consistently linked to higher hospitalization rates, increased complications, and greater mortality compared with younger patients [10]. Targeted strategies for early risk stratification and optimized management of elderly patients are therefore essential to reduce adverse outcomes [11].

In our cohort, most of patients with acute UGIB were males (71.6%), a finding consistent with earlier studies demonstrating male predominance [11-13]. This may be explained by greater exposure of men to risk factors such as alcohol consumption and chronic liver disease in Europe, or schistosomiasis and viral hepatitis in Egypt, both of which predispose to portal hypertension and variceal bleeding [14].

Regarding etiology, our results showed that variceal bleeding was significantly more common among elderly cases compared to younger ones (58.4% vs. 40.2%, $P = 0.038$), whereas non-variceal bleeding was more frequent in younger patients (38.1% vs. 22.5%, $P = 0.025$). This pattern likely reflects the higher burden of CLD in the elderly subgroup. However, these findings differ from reports in Asia and Latin America, and some Egyptian studies, where PUD is the main cause of UGIB in older patients [7,11,12,15-17]. For example, **González-González *et al.*** recorded a higher incidence of peptic ulcers in elderly cases, attributed to greater *H. pylori* prevalence, widespread NSAID and aspirin use, and polypharmacy with anticoagulants, SSRIs, and corticosteroids [17].

Similarly, **Yadav *et al.*** demonstrated that variceal bleeding was more frequent in younger patients, while elderly patients had higher rates of PUD and malignancy-related bleeding [11]. These discrepancies may be explained by differences in comorbidity distribution, as our elderly patients had higher rates of liver disease, in contrast to Yadav's study, where younger patients carried more liver-related comorbidities. **Hossam *et al.*** also reported varices and peptic ulcers as the predominant etiologies in both age groups, but with varices more frequent in younger patients and ulcers more common in the elderly [7]. By contrast, in our cohort, elderly patients exhibited a higher prevalence of liver disease, likely accounting for the predominance of variceal bleeding observed, while in **Hossam *et al.*** [7] study, no significant difference between both groups was found regarding liver disease comorbidities.

Risk stratification using the Rockall score demonstrated significantly higher values among elderly patients compared with younger ones (3.96 vs. 2.40, $P < 0.001$), indicating greater risk of adverse outcomes. These results are agreement with those of **Hossam *et al.*** in Egypt (3.90 vs. 2.56, $P < 0.001$) and **González-González *et al.*** in Mexico (5.6 ± 1.9 vs. 4.2 ± 2.1, $P < 0.001$) [7,17].

In terms of clinical outcomes, rebleeding rates did not differ significantly between elderly and younger patients. This was in agreement with **Charatcharoenwitthaya *et al.***, who attributed the absence of difference to the inclusion of all UGIB cases irrespective of etiology. The predominance of clean-based ulcers, which carry a low rebleeding risk, may have diluted the effect of high-risk stigmata, particularly in elderly patients with peptic ulcer bleeding [12]. Similarly, no significant differences were observed between the two age groups in terms of hospital stay,

ICU admission, or transfusion requirements. These findings are consistent with **Segal and Cello**, who found no differences in hospital course or resource utilization between patients above and below 60 years [18]. However, our results contrast with those of **Hossam *et al.***, who reported longer hospital stays in elderly patients (8.84 vs. 6.86 days, $P < 0.001$), faster recovery in younger patients, and higher morbidity in the elderly, including impaired consciousness ($P = 0.026$) and shock ($P = 0.001$) [7].

Regarding mortality, the current study showed markedly higher mortality among elderly patients compared with younger ones (14% vs. 2.1%, $p = 0.001$). This agrees with the study of **Hossam *et al.*,** in Egypt, who recorded that the incidence of mortality was high in the elderly than in young (33.1% vs 15.7% with $P < 0.001$) [7]. Also, **Shalaby *et al.*** in Egypt concluded that esophageal varices were responsible for 45% deaths of elderly patients with UGIB as compared to 7.4% in non-variceal cases. On the contrary to our results, several previous studies failed to confirm an age-related increase in mortality risk [16,18,19]. For example, **Thongbai *et al.*** reported no significant difference in 1-month mortality between elderly and younger patients (13.6% vs. 8.1%, $P = 0.1$). They also observed a relatively low in-hospital mortality rate of 3.4%, attributed to the small proportion of cirrhotic patients with portal hypertension (11.22%)—a subgroup known to have a higher mortality risk [16].

This study has several limitations. First, it was a single-center study, which may limit generalizability. Second, only patients undergoing endoscopy were included, while those refusing the procedure or discharged directly from the Emergency Department were excluded, introducing potential selection bias. Third, the relatively small sample size, particularly in the poor outcome subgroup, may have limited statistical power. Fourth, lack of detailed data on endoscopic interventions may have influenced interpretation of outcomes. Finally, we did not assess the prognostic accuracy of scoring systems using ROC curve analysis, nor did we perform univariate or multivariate analyses to identify independent predictors of mortality.

CONCLUSION

This study demonstrates that elderly patients with acute UGIB present with a significantly higher burden of comorbidities, impaired hepatic and renal function, and unfavorable coagulation profiles compared with younger patients. Variceal bleeding was more common in the elderly, reflecting their higher prevalence of CLD, whereas PUD predominated among younger patients. Importantly, the Rockall score was significantly higher in the elderly, underscoring their elevated risk of adverse outcomes. Mortality was also markedly higher in older patients, establishing advanced age as a strong predictor of poor prognosis in acute UGIB. These findings highlight the requirement for early risk stratification, vigilant monitoring, and tailored management plans in elderly patients to reduce mortality and improve outcomes.

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