



FACTORS PREDICTIVE OF RECURRENCE OF BLEEDING AFTER A BLEEDING EPISODE ON NON-STEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDS)

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SUMMARY:

INTRODUCTION:

Upper GI haemorrhage (UGIH) may be associated with haemorrhagic recurrence in patients on NSAIDs.

The aim of our work is to identify factors predictive of recurrence after a bleeding episode in patients on non-steroidal anti-inflammatory drugs.

PATIENTS AND METHODS:

This is a retrospective study involving 145 patients collected the hospital of Sikasso between April 2018 and April 2023. All patients admitted for HDH on NSAIDs were included. A descriptive study of the study population was carried out, as well as a univariate analysis in search of an association between haemorrhagic recurrence and the clinico-biological and socio-demographic characteristics of our patients.

RESULTS :

The mean age of our patients was 48 years, with a slight male predominance. Thirty percent of patients (44 patients) were on long-term aspirin therapy. Sixty-nine percent (100 patients) had an ulcer. Twenty-five (17.24%) patients had experienced recurrent haemorrhage. Univariate analysis showed that recurrent haemorrhage was significantly associated with the presence of a lower haemoglobin level (<5g/dl) ($p=0.05$), with a mean number of packed red blood cells transfused of 2 ($p=0.1$), long-term aspirin in 54% of patients with recurrence ($p=0.03$), 100% of patients with recurrence had positive helicobacter pylori (HP) histology or

HP serology ($p=0.02$), active bleeding at initial endoscopy was noted in 38% ($p=0.3$) of patients.

CONCLUSIONS :

In our series, the predictive factors for haemorrhagic recurrence in patients on NSAIDs were haemoglobin <5 g/dl, presence of helicobacter pilory infection, long-term aspirin and Forrest stage I.

KEYWORDS: predictive factor, haemorrhage, NSAID, recurrence.

INTRODUCTION:

Upper gastrointestinal haemorrhage (UGIH) may be associated with haemorrhagic recurrence in patients taking NSAIDs.

Non-steroidal anti-inflammatory drugs (NSAIDs) are a class of medicines widely used throughout the world, both as prescribed by healthcare professionals and for self-medication, and sometimes for a flexible duration.

Among the various indications, chronic pain plays a predominant role in the constant use of this medicine, and therefore plays a part in the occurrence of gastroduodenal toxicity, and consequently digestive haemorrhage.

The doses of NSAIDs used are double those generally recommended in the treatment of pain associated with osteoarthritis when an NSAID is to be used after failure of paracetamol treatment or appropriate exercises(1).

The key question is still to justify the formal indication for this NSAID, given the risk of gastric, renal and cardiac side-effects.

For the treatment of pain caused by osteoarthritis, paracetamol and appropriate mobilisation remain the first choice(1,2).

Given the frequent recurrence of digestive haemorrhage in patients taking NSAIDs, we are interested in the factors that may be responsible for the recurrence of haemorrhage, given the enormous risks involved.

The aim of our work is to identify factors predictive of recurrence after a haemorrhagic episode in patients taking non-steroidal anti-inflammatory drugs.

Patients and methods:

This is a retrospective study involving 145 patients collected at Sikasso Hospital between April 2018 and April 2023. All patients admitted for HDH on NSAIDs were included. A descriptive study of the study population was carried out, as well as a univariate analysis in search of an association between haemorrhagic recurrence and the clinico-biological and socio-demographic characteristics of our patients. The data were entered into Excel and then analysed using Epi-info version 7 software.

Results:

The mean age of our patients was 48 years (range 15 years, 74 years), with a male predominance (94/51), a ratio of 1:84. Thirty percent of patients (44) were on long-term aspirin therapy. Sixty-nine per cent (100 patients) had an ulcer. Twenty-five (17.24%) patients had experienced recurrent haemorrhage. Univariate analysis showed that recurrent haemorrhage was significantly associated with the presence of a lower haemoglobin level (<5g/dl) (p=0.05), with a mean number of packed red blood cells transfused of 2 (p=0.1), long-term aspirin in 54% of patients with recurrence (p=0.03), 100% of patients with recurrence had positive helicobacter pylori (HP) histology or HP serology (p=0.02), active bleeding at initial endoscopy was noted in 38% (p=0.3) of patients. The death rate was 9% (13 patients).

GENDER OF PATIENTS :

Table: Gender distribution of patients :

Gender	Workforce	Percentage
Male	94	64,82
Female	51	35,18
Total	145	100

Men were in the majority, with a sex ratio of 1.84.

COMMENTS :

Upper gastrointestinal haemorrhage is a long-standing concern, with a poor prognosis known since ancient times(3).

HDH is more frequent in men, but this trend has diminished in recent years with the ageing of the population (4,5,6).

The mean age of our patients was 48 years, comparable to the results reported by Razafimahefa et al in Madagascar [7], Samlani-Sebbane et al in Morocco [8] and Bagny et al in Togo [9], which were 45, 48 and 49 years respectively.

In our study, 69% (100 patients) had an ulcer as a cause of haemorrhage. Our result is significantly higher than those of Razafimahefa et al [7] and Samlani Sebbane et al [8], which were 35.6% and 16% respectively. The involvement of NSAIDs in the pathophysiology of the ulcer and its haemorrhagic complications could explain this state of affairs.

In our series, haemorrhagic recurrence was 17.24% higher than that found in the study by Hagege et al [10], which was 5.4%.

The explanation for this significant difference in our series could be linked to univariate analysis, which showed that haemorrhagic recurrence was significantly associated with the

presence of a low haemoglobin level, an average number of packed red blood cells transfused, long-term aspirin use and positive helicobacter pylori (HP).

In our series, the mortality rate was 9%. This mortality is higher than that reported by Hagège et al [10], which was 5.1%, but lower than those reported by Samlani-Sebbane et al [8] and Koumaré [11], which were 22.4% and 23.4% respectively. These differences in data can be explained by the methodologies used.

CONCLUSIONS:

In our series, the predictive factors for haemorrhagic recurrence in patients on NSAIDs were haemoglobin <5 g/dl, presence of helicobacter pilory infection, long-term aspirin and Forrest stage I.

Digestive haemorrhage in adults is one of the main digestive emergencies and consequently a major cause of morbidity and mortality. The young age of our patients and the frequency of male sex are reported in our context. Haematemesis was the main reason for consultation.

Mortality was due in most cases to haemorrhagic shock, hence the need for rapid, well-coordinated management by all the healthcare professionals involved.

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