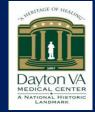


Incidence of major gastrointestinal bleeding for early versus late hemoglobin monitoring in veterans taking apixaban

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Introduction

- Gastrointestinal bleeding is a major cause of hospital-associated mortality and a financial burden on the health care system
- Hemoglobin levels are frequently used to screen for anemia and bleeding in patients on anticoagulation therapy
- The purpose of this study was to evaluate if early hemoglobin monitoring prevented major gastrointestinal bleeding resulting in hospitalization in patients on apixaban

Methods

- Retrospective analysis of veterans at Dayton VAMC who were started on apixaban between 2013 and 2020
- Demographics, HASBLED score at apixaban initiation, days between apixaban initiation and subsequent Hgb check, duration of apixaban use, and incidence of major gastrointestinal bleeding were collected

Table 1: Comparisons between early and late hemoglobin monitoring groups

| - | <u> </u> | | | |
|--|-------------------|------------------|--------|---|
| | ≤90 days (N=1376) | >90 days (N=464) | Р | |
| | | | | |
| Age – Years (Mean \pm St. deviation) | 72.8±10.0 | 73.6±10.8 | 0.10 | |
| Sex | | | | Ĺ |
| Male | 1345 (97.7) | 454 (97.8) | | Ĺ |
| Female | 31 (2.3) | 10 (32.2) | 0.90 | Ĺ |
| Race | | | | Ĺ |
| Caucasian | 1212 (90.7) | 425 (93.4) | | |
| African American | 124 (9.3) | 30 (6.6) | 0.08 | |
| | · · | | | ĺ |
| HASBLED Score (Mean ± St. deviation) | 2.27±1.08 | 2.13±1.02 | 0.022 | |
| | | | | ĺ |
| Duration of Apixaban - Months (Mean \pm St. deviation) | 21.3±16.1 | 31.0±20.1 | <0.001 | |
| | | | | |
| Incidence of Major GI bleed | 40 (2.9%) | 3 (0.6%) | 0.005 | |

Early hemoglobin monitoring was not associated with a decrease in major gastrointestinal bleeding but was associated with significantly earlier discontinuation of apixaban therapy.

Results

- 1376 (75%) had a Hgb screening within 90 days (Early Hgb Monitoring)
- 464 (25%) had an initial Hgb screening after 90 days (Late Hgb Monitoring)
- There were no clinically significant differences between the two groups
- Duration of apixaban use 21.3±16.1 in the early group and 31.0±20.1 in late group (p<0.001)
- Incidence of major gastrointestinal bleeding was 2.9% in the early group and 0.6% in the late group (p=0.005)

Conclusion

- No decrease in major gastrointestinal bleeding with early monitoring
- 10-month longer duration of apixaban use in the late monitoring group
- Earlier monitoring may lead to discontinuation of anticoagulation without prevention of major gastrointestinal bleeding.
- Further prospective should be performed to assess if Hgb monitoring in combination with other interventions can prevent hospitalization

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