**Title: Elevated Troponin in Patients With Acute Gastrointestinal Bleeding (AGIB): Prevalence, Predictors and Outcomes: A Retrospective Analysis.**

**Background**: Cardiac troponin (T) is used to diagnose acute coronary syndrome. However, T can also be elevated secondary to demand ischemia. The clinical role of elevated T on acute gastrointestinal bleeding (AGIB) patients is unclear. We aim to analyze the prevalence, predictors, and outcomes of high T on AGIB patients.

**Methods:** We conducted a retrospective analysis of all patients admitted with AGIB and had T ordered between 01/2014 and 12/2019. We collected demographic and clinical characteristics of these patients. Patients were divided into two groups based on T elevation. The primary endpoints were prevalence and predictors of elevated T, further cardiac workups, time to gastroenterology (GI) procedures, in-hospital, 30-day and 1-year mortality and length of stay (LOS).

**Results:** A total of 172 patients were included in the study, of whom 17% had abnormal T. Predictors of elevated T were age, lower BMI, significant blood loss requiring transfusion, history of CAD, and CKD. (Table-1 A) Abnormal T group had more cardiac consultation and procedures. (Table1-B) They had a longer Time to GI procedures from admission, had more cardiac medications prescribed on discharge, and had a longer LOS. However, there was no change in mortality between the two groups. (Table-1 C)

**Conclusions:** Our analysis shows that elevated T in patients with AGIB was associated with more cardiac consultation, testing, longer time to GI procedure, and LOS, without significantly affecting the mortality.

**Table 1-**

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| --- | --- | --- | --- |
|  | **Normal T Group** **(n=143)** | **Abnormal T****Group (n=29)** | ***P-Value*** |
| 1. **Predictor of elevated troponin**
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| **Age** | 68 years | 81 years | **<0.001** |
| Female | 47.6 % | 41.4% | 0.543 |
| **BMI** | 27.7 | 23.8 | **0.045** |
| **Blood loss requiring transfusion** | 51.1 % | 79.3 % | **0.001** |
| Hypertension | 79.7 % | 89.7 % | 0.210 |
| Diabetes | 37.1 % | 20.7 %  | 0.196 |
| **CKD** | 30.1 % | 48.3 % | **0.05** |
| Hyperlipidemia | 58.7 % | 75.9 % | 0.084 |
| **History of CAD** | 21.0 % | 37.9 % | **0.05** |
| History of Atrial Fibrillation | 26.6 % | 37.9 % | 0.217 |
| History of Heart Failure | 16.8 % | 24.1 % | 0.6 |
| 1. **Further Cardiac consults and Testing**
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| Echo | 21.4 | 82.6 | <.001 |
| Stress Test | 0.0 | 13.0 | 0.014 |
| Catheterization | 1.5 | 4.4 | 0.440 |
| Cardiology Consultation | 16.1 | 65.5 | <.001 |
| 1. **Impact of elevated troponin on GI bleeding admissions.**
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| Time to GI Procedure | 1 day | 2 day | 0.009 |
| New Cardiac Medications | 7.3 | 34.5 | <.001 |
| Length of Stay | 3.5 days | 6 days | 0.022 |
| In-hospital Mortality | 0.7 | 3.5 | 0.310 |
| 30-day Mortality | 4.2 | 10.3 | 0.178 |
| 1-year Mortality | 13.0 | 25.9 | 0.136 |