ACCSCIENCE PUBLISHING

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ORIGINAL ARTICLE

Hospital outcomes in Jehovah's Witness patients with acute gastrointestinal bleeding: A matched cohort study

Supplementary Files

Supplementary methods: Comparator-selection protocol

Each eligible Jehovah's Witness (JW) patient who underwent inpatient endoscopic evaluation was matched individually in a 1:1 ratio with one transfusion-eligible comparator patient. Matching was performed manually through electronic medical record review.

For each eligible Jehovah's Witness patient, the comparator-selection process was conducted as follows:

(1) The index Jehovah's Witness admission was identified.
(2) The matching window was defined as the day of the Jehovah's Witness admission through 7 calendar days after that admission.
(3) Potential comparator patients admitted during the matching window and managed by the same attending gastroenterologist were identified.
(4) The same eligibility criteria regarding adult age, diagnosis, inpatient endoscopy, data availability, and absence of the prespecified comorbidities were applied to potential comparators.
(5) Potential comparators were required to meet the applicable threshold-based high-risk gastrointestinal bleeding classification: Glasgow–Blatchford Score greater than 6 for suspected upper gastrointestinal bleeding or Oakland Score greater than 8 for suspected lower gastrointestinal bleeding.
(6) Potential comparators were reviewed chronologically according to admission date.
(7) When more than one eligible comparator was available, the earliest chronologically admitted patient who satisfied all eligibility and matching criteria was selected.
(8) Comparator selection was completed without consideration of the prespecified study outcomes, including length of hospital stay, hemoglobin at endoscopy, and admission-to-procedure time.
(9) Each comparator patient was matched to only one Jehovah's Witness patient and was not reused in another matched pair.

Matching was based on meeting the applicable high-risk threshold rather than on identical or closely similar numerical scores. No numerical-score caliper was used. Patient-level Glasgow–Blatchford and Oakland Score values were not available in the final analytic dataset and therefore could not be independently verified or summarized. All 22 Jehovah's Witness patients included in the primary analysis were successfully matched with one comparator patient, resulting in 22 matched pairs.

Table S1. Detailed procedural characteristics, medication exposure, and bloodless therapy use

Cohort	Characteristic	Category	*n*	Percent
JW	GI procedure	EGD	10	45.5
JW	GI procedure	Colonoscopy	4	18.2
JW	GI procedure	EGD and colonoscopy	3	13.6
JW	GI procedure	Flexible sigmoidoscopy	1	4.5
JW	GI procedure	VCE and enteroscopy	1	4.5

(*Cont'd...*)

Table S1. (*Continued*)

Cohort	Characteristic	Category	*n*	Percent
JW	GI procedure	EGD and VCE	1	4.5
JW	GI procedure	Enteroscopy	1	4.5
JW	GI procedure	EGD and ileoscopy	1	4.5
JW	Sedation	Anesthesia-administered sedation	11	50.0
JW	Sedation	Moderate sedation	10	45.5
JW	Sedation	No sedation	1	4.5
JW	IR procedure	No	19	86.4
JW	IR procedure	Yes	3	13.6
JW	Anticoagulant or antiplatelet use	Not taking	18	81.8
JW	Anticoagulant or antiplatelet use	Warfarin	3	13.6
JW	Anticoagulant or antiplatelet use	Clopidogrel	1	4.5
JW	Bloodless therapy	Yes	12	54.5
JW	Bloodless therapy	No	10	45.5
Matched comparator	GI procedure	EGD	13	59.1
Matched comparator	GI procedure	EGD and colonoscopy	5	22.7
Matched comparator	GI procedure	Colonoscopy	2	9.1
Matched comparator	GI procedure	Enteroscopy and colonoscopy	1	4.5
Matched comparator	GI procedure	Enteroscopy	1	4.5
Matched comparator	Sedation	Anesthesia-administered sedation	18	81.8
Matched comparator	Sedation	Moderate sedation	4	18.2
Matched comparator	IR procedure	No	21	95.5
Matched comparator	IR procedure	Yes	1	4.5
Matched comparator	Anticoagulant or antiplatelet use	Not taking	15	68.2
Matched comparator	Anticoagulant or antiplatelet use	Clopidogrel	3	13.6
Matched comparator	Anticoagulant or antiplatelet use	Apixaban	3	13.6
Matched comparator	Anticoagulant or antiplatelet use	Rivaroxaban	1	4.5

Notes: Values are presented as n and percentage within each cohort. Categories labeled "No" or "Not taking" indicate documented absence of the procedure, therapy, or medication rather than missing documentation. Complete data were available for the variables presented in this table; therefore, no imputation was performed. Percentages may not total 100% because of rounding.
Abbreviations: EGD: Esophagogastroduodenoscopy; GI: Gastrointestinal; IR: Interventional radiology; JW: Jehovah's Witness; VCE: Video capsule endoscopy.

Table S2. Exploratory associations within the Jehovah's Witness cohort

Association with hospital length of stay	*n*	Spearman ρ	95% CI	*p*-value
Admission-to-procedure time	22	0.12	−0.31 to 0.54	0.581
Hemoglobin at endoscopy	22	-0.49	−0.75 to −0.11	0.021
Initial hemoglobin	22	-0.44	−0.72 to −0.06	0.041

Notes: Spearman correlations are exploratory, unadjusted, and not corrected for multiple comparisons.

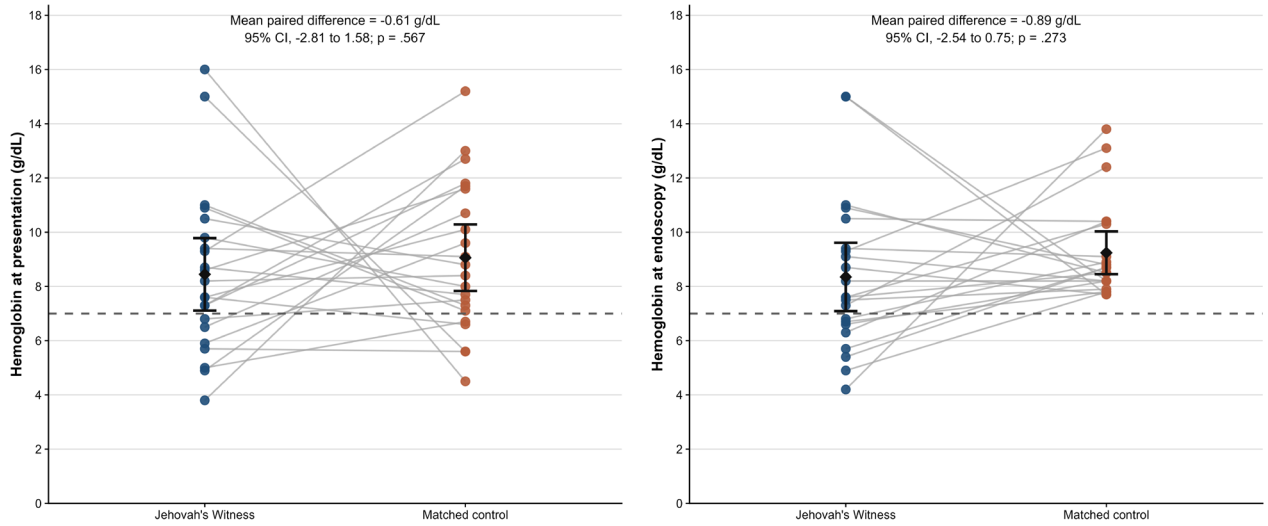

Figure S1. Paired analyses hemoglobin at presentation (left) and endoscopy (right). Lines connect matched patients. Diamonds and error bars indicate group means and 95% confidence intervals. The dashed horizontal line marks 7 g/dL.

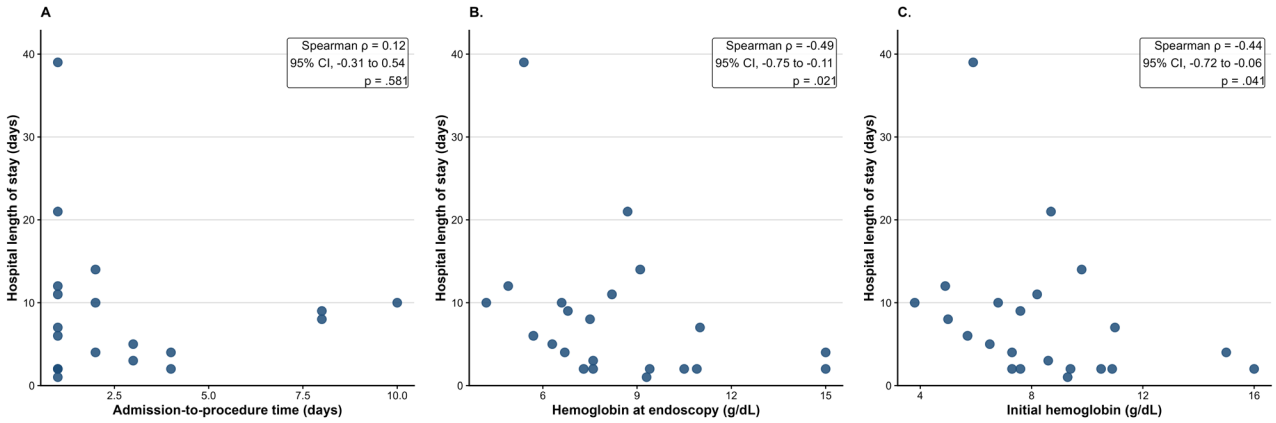

Figure S2. Exploratory associations of admission-to-procedure time (A), hemoglobin at endoscopy (B), and initial hemoglobin (C) with length of hospital stay. Each point represents one JW patient. Curves are descriptive LOWESS, locally weighted scatterplot smoothing. Correlations were evaluated using Spearman rank correlation and should not be interpreted as causal.