

RDSTF – Region 5
Standard Principles and Guidelines
for Prehospital Management of the Trauma Patient
Geriatric Head Trauma on Anticoagulants

These are meant as guidelines and are not a requirement

DEFINITIONS/ABBREVIATIONS

Geriatric	Individuals 65 years of age or greater	GLF	Ground Level Fall
NOAC	Novel Oral Anticoagulant	ICH	Intracerebral Hemorrhage
AC	Anticoagulant	TBI	Traumatic Brain Injury
AP	Antiplatelet		

RATIONALE

- Falls account for nearly 81% of TBI-related visits in adults aged 65 and older.
- Patients taking anticoagulant or antiplatelet medication with blunt head trauma have an increased risk of ICH and have worse outcomes. Patients with ICH on antiplatelet therapy (including aspirin) have also been shown to have an increased all-cause mortality.
- Rapid diagnosis of traumatic ICH with CT scan is critical to determine if medication reversal agents or blood products are needed.
- Patients taking NOACs or antiplatelet agents may require specific reversal agents not formulary at many hospitals.
- With regard to **loss of consciousness** and GLF, there are largely 2 event types: the syncopal GLF and the mechanical (non-syncopal) GLF. The former possibly has neurologic or cardiovascular etiology and in many cases will require hospitalization and appropriate workup/consultation. For purposes of EMS transport, in this protocol, they are considered together under GLF if there is evidence of head trauma.

RECOMMENDATIONS FOR TRANSPORT TO THE NEAREST LEVEL I OR II TRAUMA CENTER

Patients over 65 years of age on anticoagulation medications or antiplatelet medications with traumatic head injury.

WITH

Loss of consciousness.

OR WITH

Altered mental status: GCS < 15, or decreased from baseline

OR WITH

Persistent vomiting, with persistent headache

REFERENCES

Ballard et al. Prehospital Triage of Older Adults with Head Injury: A Retrospective Study of the Impact of Adding “Anticoagulation or Antiplatelet Medication Use” as a Criterion. *Ann Emerg Med*. Aug 2017. 70(2):127-138.

Eriksson et al. Delayed Intracranial Hemorrhage in Anticoagulated Geriatric Patients After Ground Level Falls. *J Emerg Med*. 2019. 57(6):812-816.

Armen et al. Injuries and outcomes associated with traumatic falls in the elderly population on oral anticoagulant therapy. *Injury*. 2015. 46(2015): 1765-1771.

Heidt et al. The effect anticoagulation status on geriatric fall trauma patients. *Am J Surg*. 2016. 212:1237-1242.

Davis et al. The older they are the harder they fall: Injury patterns and outcomes by age after ground level falls. *Injury*. 2016. 47:1955-59.

The Region 5 Trauma Advisory Board Clinical Leadership Committee would appreciate your feedback on these guidelines. Please click on the link below to take a 1 minute survey to provide your input.

<https://www.surveymonkey.com/r/RDSTF5-CLC-ProtocolsFeedback>