VANDERBILT UNIVERSITY
MEDICAL CENTER

DIVISION OF ACUTE CARE SURGERY

Geriatric Trauma Patient Management Guidelines

Rationale: To assure older adults (>65 years of age) receive age-appropriate care following trauma

I. Admission Orders:

- Past medical history/Past surgical history within 24h
- Medication reconciliation by Pharm D within 48h
- Admission nurse to obtain FRAILTY Score in Epic
- Reversal plan for anticoagulation
    - If questionable Factor Xa Inhibitor use, can obtain LMW heparin level to detect presence (not amount) of drug.

Drug Class	Anticoagulant	Reversal Plan
Vitamin K antagonist	Warfarin (Coumadin)	• Vitamin K 10mg x 1 (use caution in patients with active VTEs and/or prosthetic heart valves) • FFP – Do not use if evidence of heart failure, pulmonary edema, or Jehovah's Witness • PCC (K-centra) – If not a candidate for FFP or rapid reversal indicated – repeat INR 6 hours post-administration
Factor Xa Inhibitor	Apixaban (Eliquis) Rivaroxaban (Xarelto) Edoxaban (Savaysa) Betrixaban (Bevyxxa)	• PCC (K-centra) – repeat INR 6 hours post-administration
Direct Thrombin Inhibitor	Dabigatran (Pradaxa)	• Praxbind – dosing per eStar advisor

- Additional Labs
    - B12/Vit D/TSH/FT4
    - Hgb A1C
    - Venous lactate (if polytrauma) – if elevated obtain arterial lactate
    - CK- if prolonged down time or crush injury
- EKG

  Obtain orthostatics. Nursing to document in flow sheet.

II. Admission: ICU vs. Step-down:

- Decision for TICU vs step-down is based on clinical judgment. However, if patient has any of the following, they should be considered for admission to the Trauma ICU:
    - Rib fractures (4 or greater) with increase in O2 requirement >6L NC (see APS PMG)
    - Multiple long bone fractures
    - Severe pelvic fractures
    - Hypotension: SBP < 110

III. Geriatric Consultation when step-down status:

- FRAILTY score of 4 or 5
- Polypharmacy – greater than 5 home medications
- Greater than 2 high risk medications
- Recurrent falls and/or persistent delirium
- Concern for dementia or decision-making capacity
- Multiple high-risk comorbidities such as:
    - COPD COPD Exacerbation
    - Heart failure
    - Hypertension requiring multiple agents
    - Uncontrolled diabetes
- Hip fractures/Fragility fractures – consider pre-geriatric assessment prior to OR
- Okay to schedule specific geriatric consult work up studies outpatient (i.e. carotid duplex)

IV. Specific Interventions for Geriatric Trauma Patient

- Bedside swallow – if concerned, consult Speech therapy
- Documented PharmD Medicine Reconciliation within 48 hours of admission
- Delirium minimization (See Trauma Delirium PMG) Trauma Delirium Management
    - Avoid benzodiazepines
    - Reduce antipsychotic dosing by 50%
    - Avoid Haldol >5mg or quetiapine >100mg
    - Priority for transfer out of receiving and ICU
    - Avoid anticholinergics
    - Consider narcotic-sparing analgesia regimen
- Consider beginning a medication taper for inappropriate home medications while inpatient and continued upon discharge.
    - **https://medstopper.com/** - assists w/ developing taper schedule; ensure patient agrees
- Avoid Haldol & olanzapine in Parkinson's disease – quetiapine preferred inf needed
- Avoid tramadol for pain d/t increased adverse side effects – low dose oxycodone preferred
- Sleep aids: melatonin 6mg at 18:00 preferred. May add Trazadone 25mg at 20:00 and titrate up. Avoid Ambien.
- Early mobilization and standing orders for OOBTC for all patients who are not on bed rest status.
- For patients with challenging delirium hindering placement, consider requesting bed on 7RW. Consider PM&R consult to evaluate and provide recommendations for optimizing rehab potential if IPR is recommended.

V. Goals of Care – discussion and documentation in medical record within 24h of admission

- Code Status – mandatory
- Identify if patient has Advance Directives and a Surrogate Decision Maker
- Consider Palliative care consult for:
    - Surrogacy/advanced directive

- Family conflict concerns
- Unclear goals of care
- FRAILTY score of 5

Geriatric Polypharmacy: Medications to Avoid

- Tricyclic antidepressants (i.e amitriptyline, imipramine)
- Promethazine
- Hydroxyzine
- Benztropine
- Scopolamine
- Nitrofurantoin (do not use if Cr Cl <60 ml/min)
- Alpha-1-blockers: terazosin, doxazosin. Tamsulosin is preferred if able.
- Central alpha-agonists: clonidine, guanfacine, methyldopa
  - IF clonidine is home med, restart at appropriate dose for current vitals and wean as tolerated – do not stop abruptly if patient has used long term
- Barbiturates
- First generation antihistamines (i.e. chlorpheniramine, diphenhydramine)
- Megestrol: poorly tolerated, increased VTE risk
- Anti-spasmodics (bladder): tolterodine, oxybutynin, dicyclomine
- Opiates: If long acting needed oxycontin is preferred over MS Contin (long-acting morphine)
- Second generation antipsychotics (example: quetiapine, olanzapine)
  - If absolutely necessary for care & safety, please refer to the Trauma Delirium PMG
- Benzodiazepines: Do not use for insomnia, anxiety, agitation, or delirium. May be appropriate for seizure disorders, palliative care, benzo withdrawal, or peri-procedural.
- Cyclobenzaprine
- Tramadol
- Oral estrogen: If on home oral estrogen, please hold while inpatient d/t increased VTE risk. Consider changing to patch upon discharge.

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