Geriatric Emergency Medicine: Trauma in the Older ED Patient & Elder Mistreatment

1. **List 5 changes to your trauma assessment in older adults?**

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Consider medications – BB, anticoagulants
Consider inciting event
Delirium prevention
Heightened awareness for triage
Low mechanism does not correlate with injury severity
Increase use of advanced imaging
Different vital signs
Increased risk of ICH, spine injuries, pulm injuries, extremity fractures
Airway changes
Etc…..

2. **What are three airway changes or considerations present in older adults?**

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_____
_____
_____

Less reserve – need to preoxygenate
Dentures – keep in for BMV
Neck mobility issues
Larger tongue
RSI medication adjustments

3. **What HR and Systolic BP cut-off should you consider using for geriatric trauma patients when thinking of hemorrhagic shock?**

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Mortality increases considerably in the elderly patients for **HRs >90** beats per minute (bpm), an association not seen until HR of 130 bpm in the young group.

Mortality significantly increases with systolic blood pressure (**SBP) <110 mm Hg** in the geriatric patients but not until a SBP of 95 mm Hg in the young patients.

4. **Two reasons why the abdomen exam in older adults in unreliable?**

- Altered pain perception (fewer peripheral sensory nerve cells in peritoneum)
- Thinner abdo muscles → less ability to produce guarding or react to rebound
- Smaller omentum → less able to wall off intra-abdo infection, so they develop peritonitis earlier even without pain initially

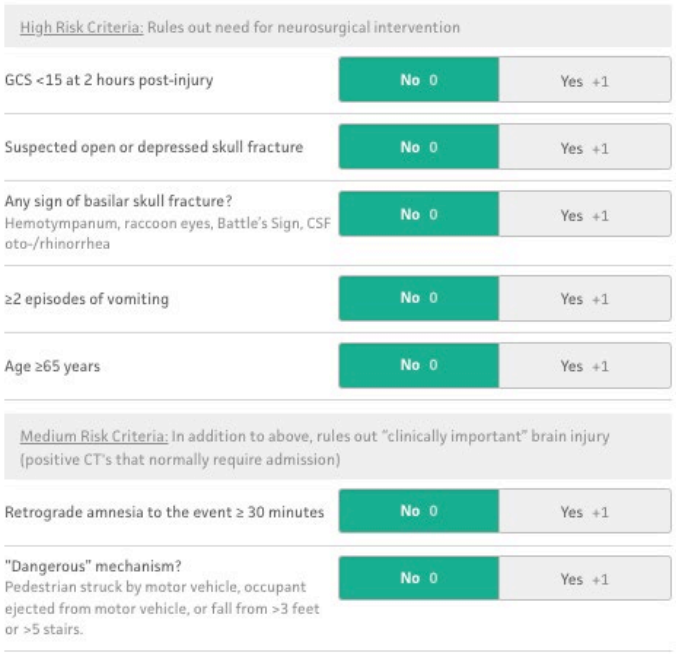
5. **Broadly speaking, list 3 types of injuries that older adults at increased risk of with trauma?**

Spine injuries: odontoid fractures, central cord
ICH
Extremity fractures
Resp complications with fractures, pulm contusions

6. **Canadian CT head rule:**
    a. **What are the criteria for patients included in the CCHR?**

- Minor head injury (blunt trauma to the head resulting in witnessed LOC, definite amnesia, or witnessed disorientation)
- Initial ED GCS ≥ 13
- Injury within the past 24 hours

    b. **What are the high risk criteria of the CCHR?**



7. What are the 5 major types of elder mistreatment?

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_____
_____
_____
_____
_____

Physical
Neglect
Sexual
Psychological/emotional
Financial exploitation

8. List 5 risk factors for victimization of elder mistreatment?

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_____
_____
_____
_____
_____

BOX 186.1

Potential Risk Factors for Elder Abuse

FOR BECOMING A VICTIM

Functional dependence or disability
Poor physical health
Cognitive impairment/dementia
Poor mental health
Low income/socioeconomic status
Social isolation/low social support
Previous history of family violence
Previous traumatic event exposure
Substance abuse

FOR BECOMING A PERPETRATOR

Mental illness
Substance abuse
Caregiver stress
Previous history of family violence
Financial dependence on older adult

9. List 5 clues on history of elder mistreatment?

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_____
_____
_____
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BOX 186.3

Indicators From the Medical History of Possible Elder Mistreatment

Poor living conditions according to paramedics or others
Unexplained injuries
Past history of frequent injuries
Delay between onset of medical illness or injury and seeking of medical attention
Recurrent visits to the ED for similar injuries
Using multiple physicians and EDs for care rather than one primary care physician ("doctor hopping or shopping")
Noncompliance with medications, appointments, or physician directions
Patient or caregiver reluctant to answer questions
Strained patient/caregiver interaction
Inconsistent history of injury mechanism between the patient and caregiver
Elderly patient referred to as "accident prone"
Caregiver not able to give details of the patient's medical history or routine medications
Caregiver answers the questions regarding the patient
Abandonment of the patient in the ED by the caregiver

ED, Emergency department.

10. List 5 clues on physical exam of elder mistreatment?

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BOX 186.5

Physical Signs Suspicious for Potential Elder Abuse or Neglect

PHYSICAL ABUSE

Bruising in atypical locations (not over bony prominences/on lateral arms, back, face, ears, or neck) (see Fig. 186.1)
Patterned injuries (bite marks or injury consistent with the shape of a belt buckle, fingertip, or other object) (see Fig. 186.2)
Wrist or ankle lesions or scars (suggesting inappropriate restraint) (see Fig. 186.3)
Burns (particularly stocking/glove pattern suggesting forced immersion or cigarette pattern) (see Fig. 186.4)
Multiple fractures or bruises of different ages (see Fig. 186.5)
Traumatic alopecia or scalp hematomas
Subconjunctival, vitreous, or retinal ophthalmic hemorrhages
Intraoral soft tissue injuries

SEXUAL ABUSE

Genital, rectal, or oral trauma (including erythema, bruising, lacerations) (see Figs. 186.6 and 186.7)
Evidence of sexually-transmitted disease

NEGLECT

Cachexia/malnutrition
Dehydration
Pressure sores/decubitus ulcers (see Figs. 186.8 to 186.10)
Poor body hygiene, unchanged diaper
Dirty, severely worn clothing
Elongated toenails (see Fig. 186.10)
Poor oral hygiene (see Fig. 186.11)

Gibbs LM: Understanding the medical markers of elder abuse and neglect: physical examination findings. Clin Geriatr Med 30:687–712, 2014; Palmer M, Brodell RT,