Geri-EM Session: Falls, Functional Assessment, Transitions of Care
Short Answer Questions

1. **What are 3 major components to the approach to the older ED patient with falls?**

Answer:

1. Assess for underlying cause(s) for fall
2. Evaluate for injuries resulting from the fall
3. Safe disposition planning including fall prevention

2. **What are six predisposing factors for why older people are at increased risk of falls?**

Answer:

- CNS changes: slower nerve conduction, dec reflex responses
- MSK changes: arthritis, dec muscle mass
- Sensory impairment: visual, hearing
- Cognitive impairment
- Dec proprioception and vibration sense
- Polypharmacy and sensitivity to medications/substances
- Incontinence/nocturia

3. **List six types of medications that can contribute to falls in older patients?**

Answer:

- Benzodiazepines
- hypoglycemic agents

- muscle relaxants
- antipsychotics
- antidepressants
- antihypertensive agents
- diuretics
- opioids
- anticholinergics

4. **What is the definition for diagnosis of orthostatic hypotension?**

Answer:
- Drop in systolic BP >20mmhg upon standing within 3 minutes
- Drop in diastolic BP >10mmhg upon standing within 3 minutes

Clinical definition is after being supine for 5 min and moving to standing position thereafter

5. **What are four evidence-based interventions to prevent falls?**

Answer:
Cochrane Review: Interventions demonstrating effectiveness (Gillespie et al., 2012)
1. Multidisciplinary/multifactorial screening/intervention programs in the community
2. Exercise program for muscle strengthening and balance retraining, individualized prescribed program
3. Home hazard assessment and modification
4. Withdrawal of psychotropic medication
5. Cardiac pacing for fallers with carotid sinus hypersensitivity
6. Tai chi group exercise
7. First cataract surgery

6. **A) What are the six questions of the ISAR tool (Identifying Seniors at Risk)?**

Answer:

BOX 183.1

Identification of Seniors at Risk (ISAR) Tool

1. Before the illness or injury that brought you to the emergency department, did you need someone to help you on a regular basis? (yes)
2. Since the illness or injury that brought you to the emergency department, have you needed more help than usual to take care of yourself? (yes)
3. Have you been hospitalized for one or more nights during the past 6 months (excluding a stay in the emergency department)? (yes)
4. In general, do you see well? (no)
5. In general, do you have serious problems with your memory? (yes)
6. Do you take more than three different medications every day? (yes)

Each "yes" response counts as 1 point, for a total score ranging from 0 to 6. A patient is considered at high risk when the score is 2 or more.

(ISAR, original)

	No	Yes
1) Before the illness or injury that brought you to the Emergency, did you need someone to help you on a regular basis?	0	+1
2) In the last 24 hours, have you needed more help than usual?	0	+1
3) Have you been hospitalized for one or more nights during the past six months?	0	+1
4) In general, do you have serious problems with your vision that cannot be corrected with glasses?	0	+1
5) In general, do you have serious problems with your memory?	0	+1
6) Do you take six or more different medications every day?	0	+1
Positive test is 2 or more	Total	/6

(ISAR-Revised)

B) With the ISAR tool, what is a positive score i.e. what defines a high-risk patient?

Answer:
A score of 2 or more is usually considered as the ISAR POSITIVE threshold, based on validation and predictive studies, because of its high sensitivity.
But many EDs and studies have used a score of 3 or more out of 6, in order to reduce the number of patients with a positive screen who need intervention, in the context of resource allocation. This increases the specificity, at the cost of decreased sensitivity.

Ref:

Galvin R, Gilleit Y, Wallace E, et al. Adverse outcomes in older adults attending emergency departments: A systematic review and meta-analysis of the Identification of Seniors At Risk (ISAR) screening tool. Age Ageing. 2017;46(2):179-186.
McCusker J, Bellavance F, Cardin S, Trépanier S, Verdon J, Ardman O. Detection of older people at increased risk of adverse health outcomes after an emergency visit: The ISAR screening tool. J Am Geriatr Soc. 1999;47(10):1229-1237

C) What outcomes does the ISAR score predict? (list 4)

Answer:
Outcomes after an ED visit:
· Hospitalization: ISAR predicts risk of hospital admission, readmission, and longer hospital stays for up to 6 months following as ED visit.
· Mortality: ISAR predicts risk of mortality for up to 6 months following an ED visit.
· Return ED Visits: ISAR predicts risk of more frequent return ED visits for up to 6 months following an ED visit.
· Use of Community Services: ISAR predicts risk of high use of community services during the 5 months following the ED visit.

In addition to its ability to predict adverse outcomes, ISAR performs well as a screening tool to detect seniors with significant current geriatric problems:
· Current Functional Impairment.
· Presence of Depression.
· Unresolved Geriatric Problems: Seniors with a positive ISAR screen have 3 times the prevalence of unresolved geriatric problems compared to those who test negative.

Ref: Johanne Laplante, R. N., de la Montérégie-Est, C. I. S. S. S., & Rick Mah, M. D. The ISAR Screening Tool Manual©.

7. **List 6 ADLs and 6 IADLs**

ADLs :

IADLs :

Answer :

ADLs :

- Transferring
- Toileting
- Bathing
- Dressing
- Feeding
- Continence

IADLs :

- Meal prep
- Housekeeping
- Medication management
- Finances
- Transportation/driving
- Shopping
- Phone use

8. **List 3 reasons why transitions in care are higher risk for older adults?**

Answer:

- Complex medical problems
- Multiple medications
- Cognitive impairment
- Hearing/visual impairment
- Multiple care team members
- Multiple care settings