

Evaluating Cognition in Older Adults with Multiple Chronic Conditions

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Why Are You Doing a Physical Exam?



Increased Risk of Cognitive Impairment

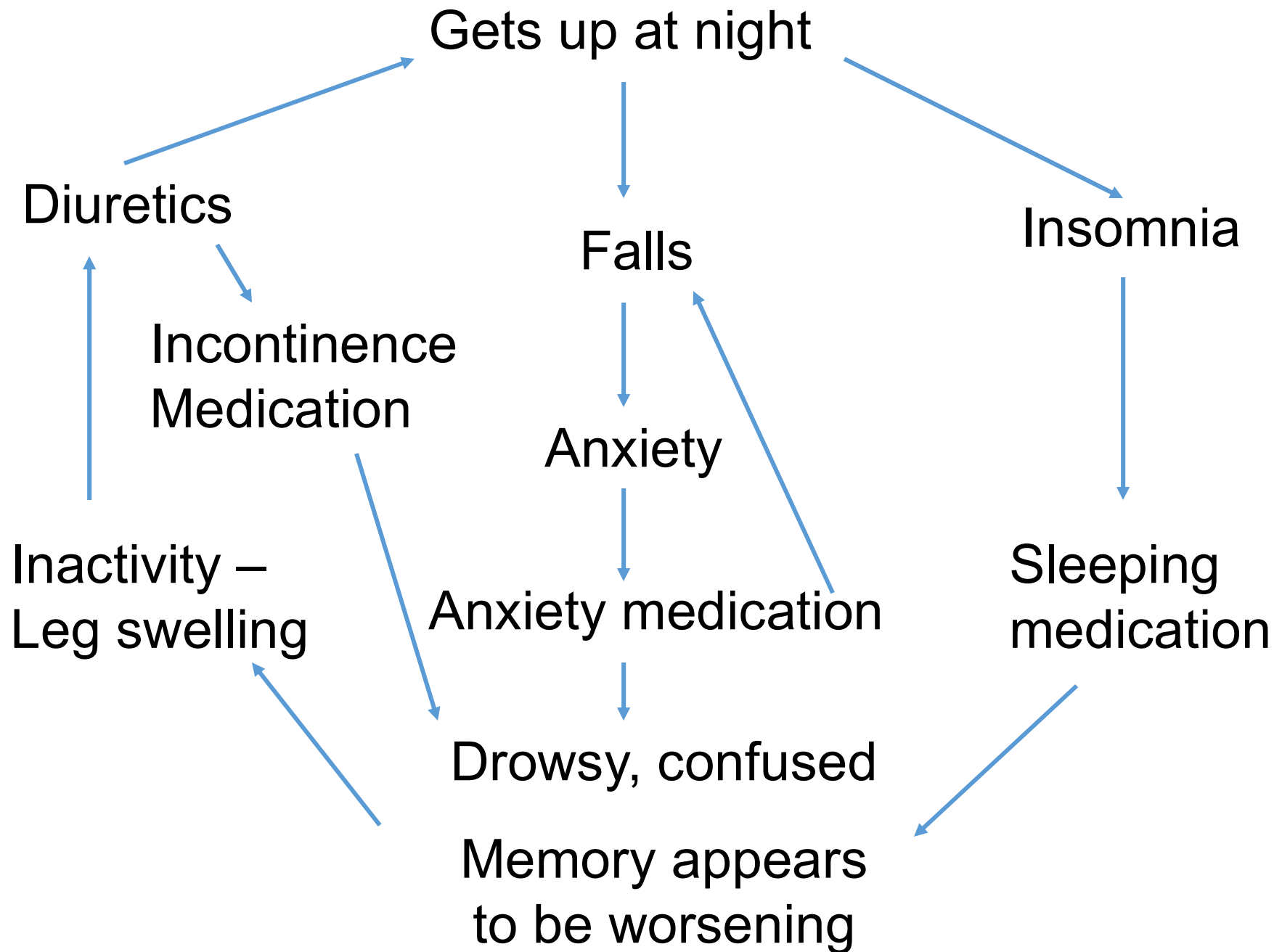
- The risk of developing mild cognitive impairment (MCI)/dementia is elevated in older adults with multi-morbidity (≥ 2 chronic conditions) (Vassilaki et al, 2015)
 - Mayo Clinic Study of Aging
 - ≥ 2 chronic conditions - HR 1.38 (95% CI 1.05-1.82)
 - ≥ 4 chronic conditions - HR 1.61 (95% CI 1.21-2.13)
- Joint effects of age and multi-morbidity (≥ 2 chronic conditions)
 - 70-79 year olds - HR 1.38 (95% CI 0.94-2.02)
 - 80 + year olds – HR 3.35 (95% CI 2.31-4.88)

Case 1

- 84 year old retired engineer with history of coronary artery disease and congestive heart failure (CHF).
 - Poorly controlled CHF resulting in low sodium levels (Lowest recorded sodium - 110, reference range 136-145)
 - MMSE fluctuation (6/2015 MMSE 20/30 to 12/2015 MMSE 26/30)

Case 2

- 80 year old former computer programmer with type 2 diabetes. Trouble with gadgets and short term memory, with mild functional loss.
 - Montreal Cognitive Assessment Score (MoCA) 14/30
 - Reports low sugar levels down to 60-70's
 - Medication included glipizide (sulfonylurea)
(Micromedex - severe hypoglycemia may occur, with an increased risk with concomitant antidiabetic medication)



Evaluating Cognition in Older Adults with Multiple Chronic Conditions

- Cognitive dysfunction in older adults with multiple chronic conditions are very complex, and often multi-factorial
- Cognitive evaluation needs to include traditional assessments (cognitive testing, labs, imaging) + medical conditions + environment