Cognitive Impairment Session Cases: Geri EM Curriculum

Case A

86yo female comes to the ED.
PMHx: dementia, HTN, atrial fibrillation, recent L3 compression fracture

Medications :
Donepezil
Apixaban
Bisoprolol
Hydrochlorothiazide
Quetiapine
Lorazepam PRN
Tramadol
Vitamin D

Triage note :
Patient agitated and confused, has dementia. Here with husband

Husband reports :
Patient is refusing care at home and has become very agitated over the past several weeks. Home care is maxed at 14 hours/week. Displaying both physical and verbal aggression to personal support workers and aggression at home to her husband.

Vitals:
HR 62, **BP** 154/95, **RR** 20, **O2** 97% on RA, **T** 36.6

1. **Do you think this patient has delirium or is this BPSD with dementia? How could you differentiate?**

Likely delirium given acute change – but the key to differentiating this is the collateral history
Can try to apply bCAM – inattention, acute change, altered LOC, disorganization

2. **What are some causes for this patient's agitation?**

    1. Pain – recent fracture
    2. Medications – quetiapine, tramadol, Ativan
    3. ?infection
    4. ?urinary retention, constipation
    5. Fall – SDH?
    6. Electrolyte abnormalities? HCTZ

3. **What non-pharmacological strategies may be helpful for a case like this in the ED?**

Family presence at bedside

Sitter/volunteer in ED
Give regular quetiapine home dose
Avoid restraints
Give food
Give Tylenol for pain
Minimize vital sign checks
Give something to occupy herself
Get in chair at bedside
Help mobilize to toilet

4. **If you needed to give medications for increasing agitation/safety concern, what medications could you consider and why?**

Give home dose of quetiapine - could give higher dose
Give small dose of olanzapine or Haldol
She is on TID Ativan – inquire with family how often she gets this, if she gets this every day, then may need to give as she may be dependent on in and need gradual taper off.

5. **End this case. Let's say this same patient, with advanced dementia but at baseline as per family is brought to the ED but with a broken wrist from a fall. The nurses managing this patient walk over to the physician's desk and ask if you can give her something and order restraints because she keeps trying to climb out of the bed. What do you do? What are your options?**

- Acknowledge the nurses concerns, explain that with her dementia these are her BPSD
- Get family and sitter at bedside.
- If she has no acute isolation concerns or mobility limitations, see if sitter or husband can walk her around
- Get her up to a chair – meal tray, give a pile of yellow cloths/towels and ask if she can help fold
- Ask her husband what typically calms her – is it a stuffed animal, a book, music, etc?
- Is she on any regular medications for her behaviors?
- Treat possible pain
- Ask – does she really need to be in the ED. If so, does the family want labs, CT head. Or can you quickly xray her wrist and through shared decision making send her home? What are the husbands goals and the family/patient goals?
- Avoid delirium in this patient….any time in the ED puts her at risk of delirium

Case B

92yo F from LTC, sent in because she had an unwitnessed fall. Was complaining of hip pain, so sent in for further workup. You look her up on netcare, no hospital visits in past 5 years.

PMHx:
Hypertension, hypothyroidism, dyslipidemia, diabetes, CKD, CHF, hearing impairment

Medications:
Ramipril, Synthroid, Lipitor, metformin, empagliflozin, Lasix

History:
You assess the patient. She doesn't know why she is in the ED today. She denies any pain when you speak to her. No voiced concerns. Minimal further history gathered at bedside.

Physical:
HR 74, **BP** 113/60, **RR** 18, **O2** 93% on RA, **T** 36.4
No signs of head trauma.
Resp and cardio exam normal.
Abdo benign
No reproducible tenderness to her pelvis/hip, dec ROM to right hip, unclear if any pain with ROM. NV intact
Neuro: no overt lateralizing deficits, PERL 3. GCS 14 – E3M6V5

1. **What are your initial steps to managing this patient in the ED? What workup, if any, would you do?**

- Get collateral from the LTC facility – what is her baseline mentation? Baseline ambulation? Frequent falls? Changes in behavior recently?
    - You call and they tell you that for the past week she has been more somnolent, usually she is oriented to place/time but has been requiring redirection.
    - Has infrequent falls. She was found in the morning by nurses beside her bed on the floor. Uses walker at baseline
- Do bCAM – positive for inattention, acute change (based on collateral), altered LOC
- Workup: basic labs, ECG, postural vitals, xray wrist, CT head
- Non-pharm in ED
- Analgesia in ED

2. **Do you think she has delirium? Why or why not?**

You find a superior ramus fracture. WBAT as per ortho. CT head normal.
Labs show mild acute on chronic kidney injury, mild elevated CRP.
COVID positive on rapid screen in ED.

You call HCT and get her admitted to hospital.