Constipation and Older Adults: Keep it Moving

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Faculty/Presenter Disclosure

- **Faculty:** Elizabeth Rhynold

- **Relationships with commercial interests: nil**
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  - **Consulting Fees:** MedX Group Inc.
  - **Other:** Employee of XXY Hospital Group

EVERY speaker must include and verbally address this slide at the start of their presentation.

Learner's objectives

- List the differential diagnosis for the most common factors contributing to constipation experienced by older adults
- Outline the components to include in the assessment of an older adult with constipation including history, physical and other investigations
- List the red flags that should be considered in the context of the goals of care
- Categorize management options tailored to the clinical situation
- If time allows: Summarize the ways the approach to diarrhea management can use similar categories of management

Virtual visit with Mrs. R – Nov. 27, 2020 13:15 – 13:30

S – Mrs. R states she has been constipated for 5 months. No history of constipation. She does not feel sick but maybe has decreased appetite. No blood in her stool. She has started taking Metamucil that she had in the house. There has been no improvement.

O – 87 years old. Last weight was 2 years ago: 63 kg. eChart review of medication indicates regular fill history of mirtazapine 15 mg daily started May 5, 2020. Last blood work was 18 months ago and was within normal limits (CBC, lytes, Cr, TSH, HbA1C). X-ray fractured wrist 7 years ago.

A – New onset constipation

P – Increase fluids and add prunes. In person assessment next week followed by targeted investigation to be discussed.

State of the Geriatric Constipation Literature

Main reference for this presentation:

- Gandell et al. CMAJ 2013 ***CMAJ* 2013. DOI:10.1503/cmaj.120819** Treatment of constipation in Older Adults

Other

- Lacy et al. Section II: Rome IV FGIDs: Diagnostic Groups Bowel: Bowel Disorders
- Emmanuel et al. International Journal of Clinical Practice 2016 Constipation in older people: A consensus statement
- Lindberg et al. 2011 World Gastroenterology Organisation Global Guideline Constipation—A Global Perspective

Does Mrs. R have constipation? Rome IV 2016

C2. Diagnostic Criteria* for Functional Constipation

1. Must include 2 or more of the following:**
    a. Straining during more than one-fourth (25%) of defecations
    b. Lumpy or hard stools (BSFS 1−2) more than one-fourth (25%) of defecations
    c. Sensation of incomplete evacuation more than one-fourth (25%) of defecations
    d. Sensation of anorectal obstruction/blockage more than one-fourth (25%) of defecations
    e. Manual maneuvers to facilitate more than one fourth (25%) of defecations (eg, digital evacuation, support of the pelvic floor)
    f. Fewer than 3 spontaneous bowel movements per week
2. Loose stools are rarely present without the use of laxatives
3. Insufficient criteria for irritable bowel syndrome

*Criteria fulfilled for the last 3 months with symptom onset at least 6 months prior to diagnosis.

** For research studies, patients meeting criteria for opioid induced constipation OIC should not be given a diagnosis of FC because it is difficult to distinguish between opioid side effects and other causes of constipation. However, clinicians recognize that these 2 conditions might overlap.

C1. Diagnostic Criteria* for Irritable Bowel Syndrome

Recurrent abdominal pain, on average, at least 1 day per week in the last 3 months, associated with 2 or more of the following criteria:

1. Related to defecation
2. Associated with a change in frequency of stool
3. Associated with a change in form (appearance) of stool

* Criteria fulfilled for the last 3 months with symptom onset at least 6 months before diagnosis

Does Mrs. R have functional constipation?

Drugs commonly associated with constipation

Over-the-counter drugs

- Antacids containing calcium or aluminum
- Calcium supplements
- Nonsteroidal anti-inflammatory drugs
- Oral iron supplements
- Antihistamines

Prescription drugs

- Opioids
- Calcium-channel blockers
- Antiparkinsonian agents
- Anticholinergics
- Diuretics
- Antipsychotics
- Tricyclic antidepressants

Gandell et al. CMAJ 2013 ***CMAJ* 2013. DOI:10.1503/cmaj.120819** Treatment of constipation in Older Adults

Does Mrs. R have functional constipation?

Disease states commonly associated with constipation

Gastrointestinal

- Colorectal carcinoma
- Diverticulosis
- Stricture
- Hemorrhoids
- Rectal prolapse

Neurologic

- Stroke
- Parkinson disease
- Dementia
- Multiple sclerosis
- Autonomic neuropathy

Connective tissue

- Systemic sclerosis
- Amyloidosis

Psychiatric

- Depression
- Anxiety
- Somatization

Metabolic

- Diabetes
- Hypothyroidism
- Hypercalcemia
- Hypokalemia

Gandell et al. CMAJ 2013 ***CMAJ* 2013. DOI:10.1503/cmaj.120819** Treatment of constipation in Older Adults

Alarm symptoms and signs inpatients with chronic constipation

- Family history of colon cancer
- Hematochezia
- Anemia
- Weight loss ≥ 5 kg in previous 6 months
- Positive result of fecal occult blood test
- Persistent constipation unresponsive to treatment
- Acute onset of constipation

Gandell et al. CMAJ 2013 ***CMAJ* 2013. DOI:10.1503/cmaj.120819** Treatment of constipation in Older Adults

Cancer Care Manitoba ColonCheck Screening Guidelines

Asymptomatic – Average risk: 50 – 74 years of age

- Routine screening with FOBT every 2 years is recommended

Asymptomatic 75 years of age and over

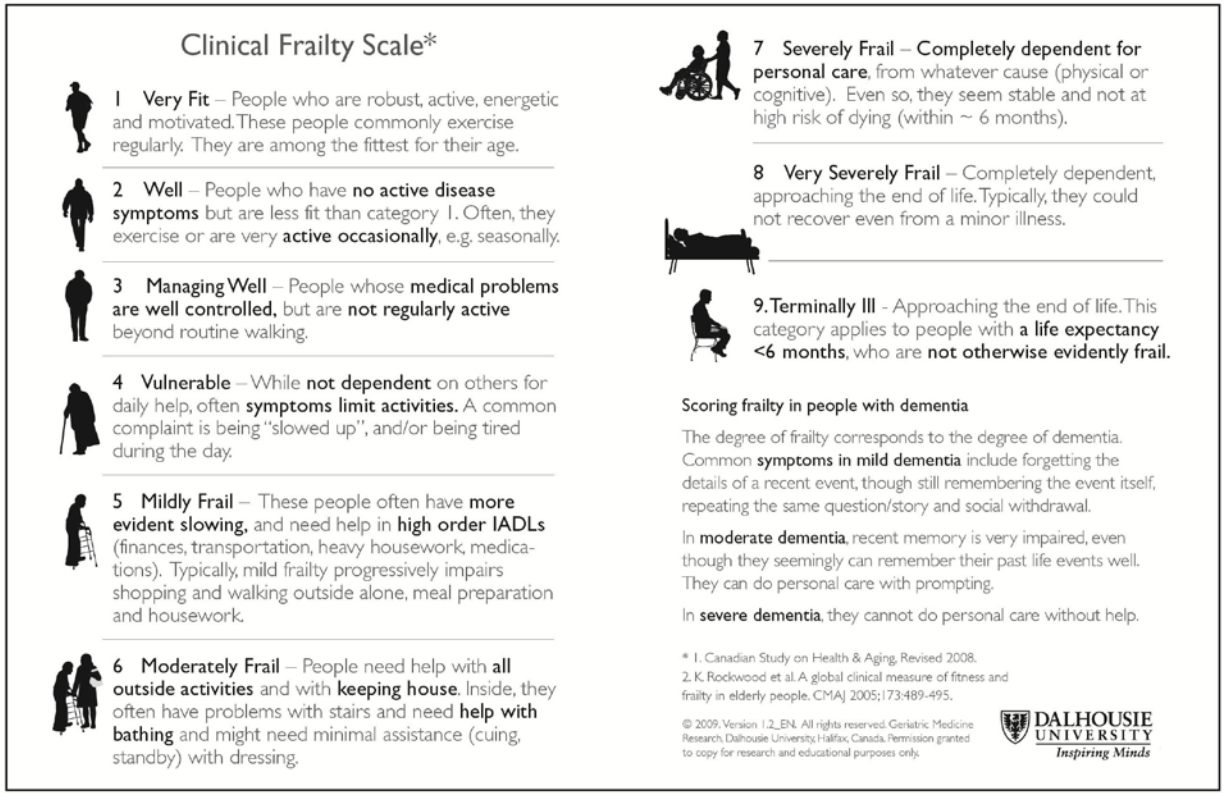
- Routine screening is not recommended
- Decision to continue screening persons 75 and older should be made on an individual basis…

Symptomatic – any age:

- Persistent rectal bleeding, change in bowel habits, and/or abdominal pain, iron deficiency anemia, palpable mass
- Refer urgently for endoscopic investigation. FOBT is not recommended.

Goals of care in the context of frailty

- Most publications I could find were specific to screening (and this case would not be screening) and focused on age
  - Age to stop? Grad et al. Canadian Family Physician Aug. 2019
  - 2011 meta-analysis 80 and older vs. 65 and older 70% higher risk of GI AE, similar trend CV/pulm AE
- The Clinical Frailty Scale uses an assessment of functional independence to identify accumulating deficits
  - Increasing frailty predicts increased vulnerability to adverse outcomes
  - No published endoscopy outcomes that I could find



Clinical Frailty Scale*

1 **Very Fit** – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

2 **Well** – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.

3 **Managing Well** – People whose **medical problems are well controlled,** but are **not regularly active** beyond routine walking.

4 **Vulnerable** – While **not dependent** on others for daily help, often **symptoms limit activities.** A common complaint is being "slowed up", and/or being tired during the day.

5 **Mildly Frail** – These people often have **more evident slowing,** and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

6 **Moderately Frail** – People need help with **all outside activities** and with **keeping house**. Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.

7 **Severely Frail** – **Completely dependent for personal care**, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).

8 **Very Severely Frail** – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.

9. **Terminally Ill** - Approaching the end of life. This category applies to people with **a life expectancy <6 months**, who are **not otherwise evidently frail.**

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

* 1. Canadian Study on Health & Aging, Revised 2008.
2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.

DALHOUSIE UNIVERSITY *Inspiring Minds*

Canadian Frailty Network

Dalhousie University CFS Guidance & Training

Under-recognized geriatric effects of bowel prep

- Mobility – dehydration associated orthostatic hypotension; falls associated with
- Multi-complexity – hypokalemia, weight loss if any complications or delay in procedures/ follow-up
- Mind – delirium risk due to multiple contributing factors
- Medications – increased toxicity of medications due to acute decline in renal function
- Matters most – having to find someone to drive them to a larger health facility, maybe staying away from home to have the procedure

http://canadiangeriatrics.ca/2017/04/update-the-public-launch-of-the-geriatric-5ms/

Virtual visit Mrs. R – Dec. 15, 2020 13:15 – 13:30

Seen in Clinic Dec. 3, 2020. No red flags on history or exam. Basic blood work ordered

S – Ongoing frustrating constipation

O – Reassuring normal lab work

A – Functional constipation

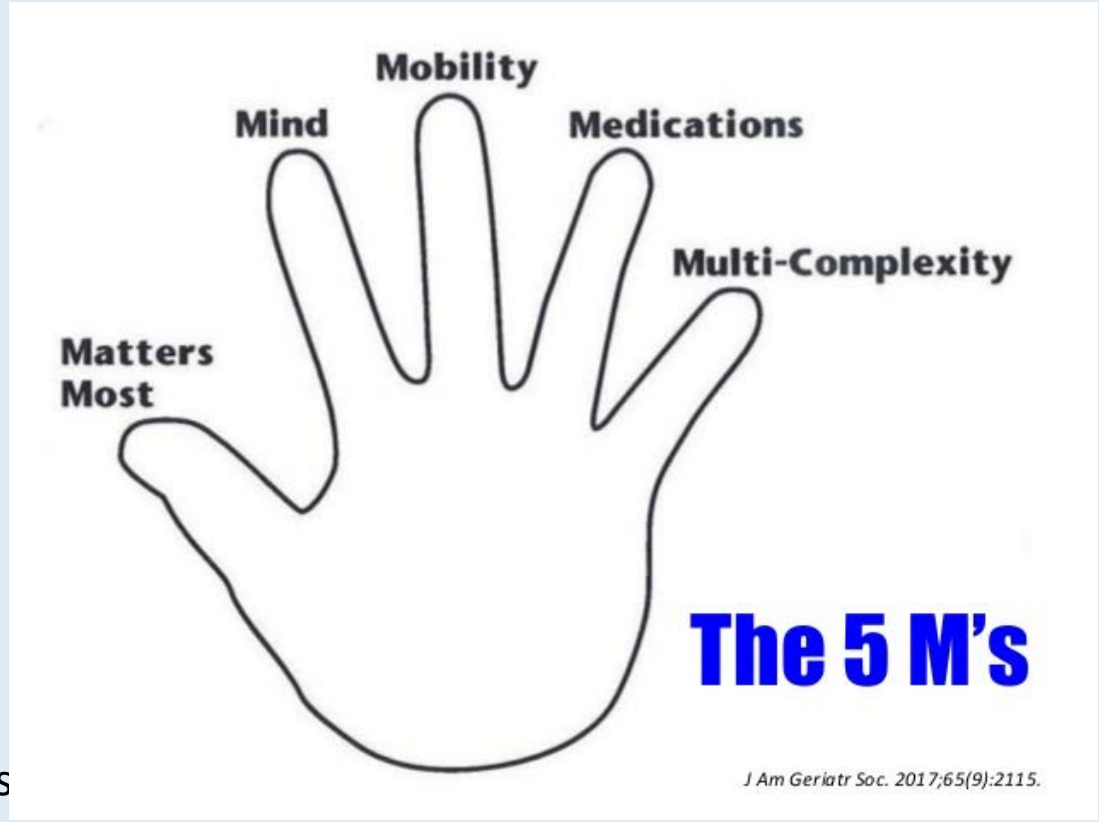
P ???????

Dependent on the 5 M's and her frailty!

Geriatric approach to Mrs. R's functional constipation

Mrs. R is at most mildly frail (CFS – 5) and prior to COVID-19 was independent, living alone in her own home

- Mobility – Mrs. R. was an avid walker. In March she stopped walking the track at her local arena. This summer she didn't walk as much outside. Now her balance is impaired and she is cautious going room to room. She is worried about falling if she hurries to the bathroom so she is cautious about drinking a lot of water
- Mind – In April she had to miss meeting her first great grandchild due to COVID-19. She was very down and anxious. She is tired all the time now but motivated and interested
- Medications – Mrs. R was started on mirtazapine because she was distressed and this was a change for her. Prior to COVID her only "medications" were calcium and vitamin D
- Multi-Complexity – Because of COVID Mrs. R's daughter is delivering a big load of groceries to her door every 2 weeks A neighbor brings milk every week.
- Matters most – Mrs. R likes to be busy in her home. She doesn't want to be spending all day on the toilet. It's a waste of time!



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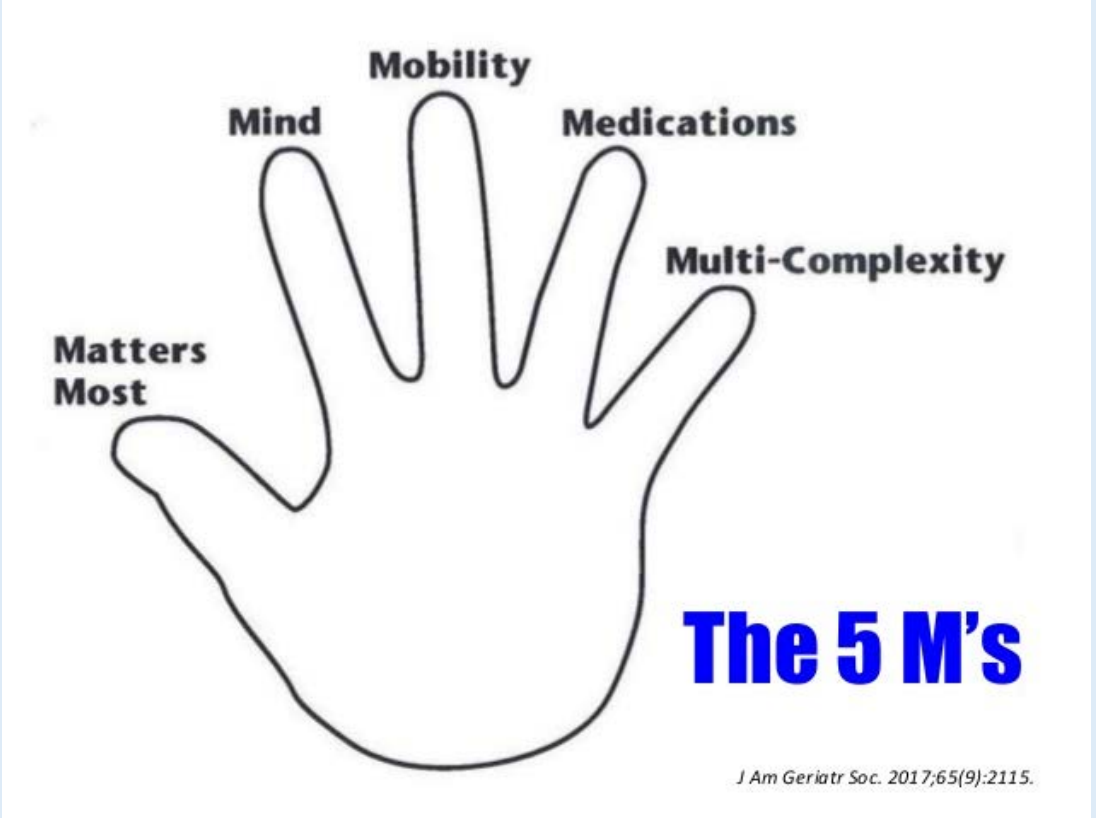
Geriatric approach to Mrs. R's functional constipation

TARGETED interventions:

- Mobility – Gait & balance exercises and a graduated walking program; discuss scheduled toileting increased water intake
- Mind – Review mood and anxiety symptoms considering strategies for adjustment or reactionary symptoms
- Medications – Assess total daily calcium intake and the need for supplement now that she has milk delivered; consider deprescribing mirtazapine; reassess Metamucil use if fluid intake continues to be low
- Multi-Complexity – Discuss strategies to reintroduce fresh fruits and vegetables
- Matters most – Endorse activity at home. Suggest she sit on the toilet after each meal to harness the gastro-colic reflex



http://canadiangeriatrics.ca/2017/04/update-the-public-launch-of-the-geriatric-5ms/

Laxatives are not a failure! Stepwise approach to the management of constipation Gandell et al.

Table 2

6. Trial of a previously preferred laxative agent (2–4 wk)
- The patient may prefer one agent over another from past experience

7. Trial of a laxative agent supported by evidence from RCTs involving older people (2–4 wk)
- Polyethylene glycol 17–34 g/d
- Lactulose 15–30 mL daily to twice daily

8. Trial of another laxative agent or a combination of agents from different classes (2–4 wk)
- Magnesium hydroxide 15–30 mg daily to twice daily
- Docusate calcium 240 mg twice daily (generally considered to be mild)
- Bisacodyl 5–10 mg/d orally or rectally STIMULANT
- Sennoside, up to 68.8 g/d in divided doses STIMULANT
- Enema or suppository

9. Referral

Opioid induced constipation (OIC)

- Many published recommendations for older adults regarding constipation management overall state the approach for adults is generally safe but may not be as effective.
- American Gastroenterological Association Institute Guideline on Opioid-Induced Constipation 2019
  - "In patients with OIC, the AGA recommends use of laxatives as first-line agents. Strong recommendation, moderate-quality evidence."
  - They did not find evidence that osmotic laxatives were better than stimulants though PEG may have been better than lactulose.
  - Fibre (bulking agents) do not affect colonic motility so have a "limited role" in OIC.
  - Laxative-refractory OIC
    - Combine 2 laxatives before escalating and schedule rather than "as needed"
    - Peripherally Acting μ-opioid receptor antagoinists (PAMORAs) do not enter the CNS (intact blood brain barrier)
    - Naldemedine (high quality over no treatment) US only RxFiles July 2020
    - Naloxegol (moderate quality) Oral, renally-dosed, $223/month
    - Methylnatrexone (conditional recommendation, low quality) Subcut., renally-dosed $54/dose

Applying the 5 M's to diarrhea (without red flags)

TARGETED assessment:

- Mobility – Is exercise triggering bowel movements? Is mobility difficulty resulting in incontinence associated with bowel urgency?
- Mind – Are there cognitive changes associated with decreased ability to recognize the need to head to the toilet? Is old food being consumed due to functional decline?
- Medications – Think about paradoxical metformin GI symptoms. Cholinesterase inhibitors increase bowel and bladder urgency. Metamucil (psyllium fibre) is an ingredient in Bran Buds
- Multi-Complexity – Consider dietary changes that may be causing or could help symptoms
- Matters most – Assess the degree to which bowel symptoms are contributing to social isolation

http://canadiangeriatrics.ca/2017/04/update-the-public-launch-of-the-geriatric-5ms/

The Scoop on the Poop (Conclusions)

- “Functional constipation” is a geriatric syndrome meaning there is the need to look for and then address multiple contributing factors
- Regardless of the goals of care it is important to comprehensively consider red flags but the approach to investigation will be guided by “what Matters most”
- Although evidence is lacking for individual lifestyle modifications targeted combinations of interventions are:
  - most likely to be safe and
  - Success (satisfaction) is unlikely be achieved without actively discussing
- There is more evidence for osmotic laxatives; PEG may be better tolerated than lactulose
- Laxatives can have a long term role in the safe management of constipation
- A similar approach to diarrhea in older adults can be applied