The Geriatric 4Ms: towards Age Friendly Health Care

MENTATION

Goals

1. Apply mentation assessment and management in the context of the Geriatric 4Ms
2. Prevent mentation problems in older adults
3. Utilize evidence - based tools for assessing mentation
4. Use non - pharmacologic and pharmacologic interventions to address mentation issues
Case Study

- 67 year old female

- HTN, DM, HL, and CAD brought to the ED by her daughter for nausea, confusion, fatigue, and loss of appetite for 3 days.
Case Study

- Patient felt sad since her sister passed away 6 weeks ago and was prescribed fluoxetine by her primary care physician 2 weeks earlier.
- On exam patient was lethargic, only oriented to place and person, and had slow speech.
- Laboratory studies revealed a serum sodium level of 124 mmol/L.

What do you think is causing the patient's problems?

Does the patient have
- Delirium?
- Complicated depression?
- Broken Heart syndrome (takotsubo cardiomyopathy)?
Patient has grief

- Hyponatremia induced by SSRI

- Grief persists in most older adults with loss but *Complicated Grief* occurs when vegetative symptoms persist several months after a sentinel event

Main domains: the 3D’s

- Depression
- Dementia
- Delirium
Other mentation issues

- Safety / stress
- Anxiety
- Grief
- PTSD
- Loneliness / Social isolation

Goal of addressing mentation

- Identify, treat and manage depression, dementia, and delirium
- Prevent the 3 Ds
Advantages of asking 4Ms with each clinical encounter

- Prepares provider for discussion on prevention
- Prepares patient for prevention or revealing concerns
- Allows to update What Matters when circumstances change
- Defines when to transition from curative to palliative care

Screening for the 3D’s

CAN BE EDUCATIONAL AND PREP THE OLDER ADULT FOR BRAIN HEALTH
Screen

Mini - cog

PHQ - 2

CAM

How to manage screen positive and screen negative older adults

Screen Negative

Screen Positive

Prevention

Non Rx

Rx
How do we prevent the 3D’s?

Prevention: dementia

Proven
- Blood pressure control
- Exercise
- Mind exercises

Likely
- Nutrition
- Social engagement
Prevention: delirium

Proven
- Avoid anti-cholinergics
- Wean psychoactive Rx slowly
- Hydration
- Orientation
- Pain free
- Sleep hygiene

Likely
- Mobility

Prevention: Depression

- Education
- Psychotherapy
- Nutrition
- Lifestyle
- Self-help manual with 6 clinic phone calls
Depression

Objectives
- Epidemiology
- Grief versus depression
- Screening
- Management

Depression risk
- Sedentary, high BMI, alcohol use and smoker
- Low vitamin D levels
- Traumatic Brain injury
- Caregiver status
Depression

- 22% of men 65 +
- 28% of women 65 +
- 85% of these receive no medical help

Epidemiology Among Older Adults

- Minor depression
  - 15% (range 8 - 40%)
  - Associated with
    - ↑ use of health services,
    - excess disability,
    - poor health outcomes,
    - ↑ mortality

- Major depressive disorder
  - 6%–10% of older adults in primary care clinics
  - 12%–20% of nursing home residents
  - 11%–45% of hospitalized older adults
Late life depression

Atypical manifestations
- Weight loss
- Fatigue
- Somatic symptoms
- Bereavement

3 Stages of bereavement
1. Numbness (weeks)
2. Depression (weeks to one year)
3. Recovery

P.J. Clayton, Bereavement
Bereavement Symptoms

No gender differences:
- Depressive symptoms
- Sleep disturbance
- Crying
- Anorexia
- Nervousness
- Concentration problems / poor memory

Bereavement and Depression

% Depressed

<table>
<thead>
<tr>
<th>Months</th>
<th>% Depressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>45</td>
</tr>
<tr>
<td>12</td>
<td>20</td>
</tr>
<tr>
<td>24</td>
<td>5</td>
</tr>
</tbody>
</table>

Months
Risk factors for persistent depression

- Younger age
- Grief beyond 2 months
- Hx of major depression
- Depression at 7 months

How to communicate with bereaved patients

- Have patient tell their story of loss
- Ask about positive memories
- Ask how things are different now
- Who helps the patient get through the day
- Any loss of resources or transportation?
Complicated Grief

- 7% of bereaved patients
- Maladaptive thoughts
- Dysfunctional behavior
- Emotionality

Complicated Grief vs Depression

**Complicated Grief**
- Yearning
- Sorrow
- Preoccupying thoughts of the deceased
- Difficult acceptance of death

**Depression**
- Depressed mood
- Anhedonia
- Worthlessness
- Psychomotor and neuro-vegetative symptoms
A Clinical Trial of Complicated Grief Treatment

16 sessions
- Sessions 1 – 3: history, daily grief monitoring, education
- Sessions 4 – 9: memories and pictures
- Sessions 10 -16: imaginal conversation with deceased


Complicated Grief Treatment trial

- n = 395 (4 sites)
- Decedent Age = 53 +/- 14
- ~ 33% violent death (accident, suicide)

NNT = 3.6
SSRI did not improve outcome

Geriatric syndrome: Late Life Depression

- Older adults may be preoccupied with somatic symptoms and less frequently report depressed mood
  - Among those who do not acknowledge sustained sadness, anhedonia for at least 2 weeks is necessary for a diagnosis of major depressive disorder

Geriatric syndrome: Late Life Depression

- Diagnosis of depression in physically ill older adults is confounded by the overlap among symptoms of major depressive disorder and somatic illness
  - “Mood disorder due to a general medical condition” should be used for patients with depression that appears to result directly from a specific medical condition
SCREENING

9-Item Patient Health Questionnaire (PHQ-9)

- 9 items cover diagnostic criteria for major depressive disorder
- Those who acknowledge thinking they would be “better off dead” or “hurting themselves” should be asked about presence of a firearm in the home
- Initial 2 questions (PHQ-2) can be used for screening
- Serial administrations can be used to reliably assess response to treatment

<table>
<thead>
<tr>
<th>PHQ-9 score</th>
<th>Depression severity</th>
<th>Clinician response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–4</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>5–9</td>
<td>Mild to moderate</td>
<td>If not currently treated, rescreen in 2 weeks. If currently treated, optimize antidepressant and rescreen in 2 weeks</td>
</tr>
<tr>
<td>10–14</td>
<td>Major depressive disorder</td>
<td>Start antidepressant therapy</td>
</tr>
<tr>
<td>≥15</td>
<td>Major depressive disorder</td>
<td>Start antidepressant therapy; obtain psychiatric consultation if suicidality or psychosis suspected</td>
</tr>
</tbody>
</table>
SCREENING

Geriatric Depression Scale (GDS)

- 15-items, Yes/No format
- Free of somatic and sleep queries
- Lacks suicidal ideation query
- Not useful for assessing treatment response

Depression treatment

- 50% of patients with major depressive disorder respond to initial antidepressant treatment
  - Additional 1/3 recover when switched to another agent or combined with a second antidepressant or psychotherapy
  - 40-60% of those who recover experience recurrence
- Current approach to mood disorders in late life:
  - Aggressive acute phase of treatment to bring about remission
  - Continuation treatment for an additional 6 months after symptom remission to prevent relapse
  - Maintenance treatment to prevent recurrence
Depression treatment

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First weeks of treatment.....

- 4 weeks is a milestone to predict who at 12 weeks will be nonresponders or partial responders
  - At 4 weeks, 1/3 will be nonresponders, 1/3 will have responded fully, and 1/3 partially
- A visit or phone call
  - first 10 days to insure adequate dosage and adherence
  - week 4 to identify non responders
ANTIDEPRESSANTS

- Selective Serotonergic Reuptake Inhibitors (SSRIs)

- Selective Serotonergic and Noradrenergic Reuptake Inhibitors (SSRI/SNRIs)

- Tricyclic Antidepressants (TCAs)

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**SSRIs**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Initial Dosage</th>
<th>Final Dosage</th>
<th>Comments/Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citalopram</td>
<td>10 mg qam</td>
<td>20 mg qam</td>
<td>Risk of Qtc prolongation in doses &gt;20 mg, nausea, tremor, hyponatremia, serotonin syndrome</td>
</tr>
<tr>
<td>Escitalopram</td>
<td>10mg qam</td>
<td>10-20 mg qam</td>
<td>Nausea, tremor, serotonin syndrome; reduce dosage in renal insufficiency</td>
</tr>
<tr>
<td>Sertraline</td>
<td>25mg qam</td>
<td>100-200 mg qam</td>
<td>Nausea, tremor, insomnia, serotonin syndrome</td>
</tr>
</tbody>
</table>
SSRI and SNRI side effects

- hyponatremia with serum sodium of less than 130 mmol/L
  - 0.06% to 2.6% for SSRIs (e.g., fluoxetine)
  - 0.08% to 4.0% for the SNRI venlafaxine

SSRI and SNRI side effects

- Falls and Fractures

- Canadian study 6600 post menopausal women
  - HR 1.88 for fragility fractures

Osteoporos Int 2014;25(5):1473–81
SEROTONIN SYNDROME

- Cognitive and behavioral changes: agitation, hyperactivity, worsening confusion, restlessness
- Diaphoresis
- Diarrhea and GI upset
- Fever usually >100.5°F
- Hyperreflexia with or without myoclonus
- Incoordination, ataxia, or new onset falls
- Ocular clonus
- Rhabdomyolysis
- Shivering
- Seizures
- Tremor