National Partnership to Improve Dementia Care in Nursing Homes & Quality Assurance and Performance Improvement

March 23, 2021
Acronyms in this Presentation

- ADL: Activities of Daily Living
- BPSD: Behavioral and Psychological Symptoms of Dementia
- CMS: Centers for Medicare & Medicaid Services
- EMR: Electronic Medical Record
- GDR: Gradual Dose Reduction
- GSA: The Gerontological Society of America
- IPA: International Psychogeriatric Association
- PCP: Primary Care Provider
Residents with Dementia-related Psychosis: Strategies for Evaluation and Care

Presenters:
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George T. Grossberg, MD
Susan Scanland, MSN, CRNP, GNP-BC
Chad Worz, PharmD, BCGP
Members of The Gerontological Society of America’s (GSA) Workgroup on Dementia-related Psychosis (in order of presentations):

- **George T. Grossberg**, MD, Samuel W. Fordyce Professor and Director of Geriatric Psychiatry, the Department of Psychiatry and Behavioral Neuroscience, St. Louis University School of Medicine

- **Alexis Eastman**, MD, Medical Director, Division of Geriatrics, UW Hospitals and Clinics and Assistant Professor, University of Wisconsin School of Medicine and Public Health

- **Susan Scanland**, MSN, CRNP, GNP-BC, CEO & Founder, Dementia Connection® Clarks Summit, PA

- **Chad Worz**, PharmD, BCGP, Executive Director and Chief Operating Officer of the American Society of Consultant Pharmacists
Members of GSA Workgroup on Dementia-related Psychosis (in order of presentations):

• **George T. Grossberg**: Consultant for Acadia, Alkahest, Allergan, Avanir, Biogen, Bioxcel, Genentech, Karuna, Lundbeck, Novartis, Otsuka, Roche & Takeda. Member of Safety Monitoring Committee for EryDel, Newron & Anavex and the Data Monitoring Committee for ITI Therapeutics.

• **Alexis Eastman**: None

• **Susan Scanland**: Consultant and speaker for Acadia Pharmaceuticals Inc., speaker for Teva Pharmaceutical Industries, Ltd.

• **Chad Worz**: None
Agenda

1. Dementia-related Psychosis: Definition and Diagnosis
2. Case Study on Making an Accurate Diagnosis
3. Dementia-related Psychosis in Long-term Care: Care Strategies
4. Tips for Documentation and Ongoing Monitoring
5. Question & Answer Session
Learning Objectives

1. Understand the clinical definition of dementia-related psychosis, including hallucinations and delusions, and how it is diagnosed

2. Recognize signs and symptoms of dementia-related psychosis in residents and how to intervene in a timely manner

3. Know when to communicate with family and residents during care management

4. Understand options for non-pharmacologic approaches

5. Be introduced to evidence on pharmacologic approaches

6. Be able to apply best practices in documentation and ongoing monitoring of residents
Part A. Dementia-related Psychosis: Definition and Diagnosis

George T. Grossberg, MD
Symptoms of Dementia-related Psychosis

- **Delusions** (false beliefs)
- **Hallucinations** (seeing or hearing things that others do not)
- **Incoherent or nonsense speech** and behavior that is inappropriate for the situation
- **Loss of insight** when individual interacts with hallucinations


Symptoms of Dementia-related Psychosis

• Can be **frequent**: Most older adults with hallucinations and delusions in dementia experience these symptoms 2 to 6 times per week (Ballard et al., 1995)

• Are **episodic** in nature (Levy et al., 1996)

• Can be **persistent** (van der Linde et al., 2016):
  - Hallucinations: up to 52 percent of patients with persistence greater than 3 months
  - Delusions: up to 82 percent of patients with persistence greater than 3 months

• If untreated, symptoms **can worsen over time**

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Dementia-related Psychosis, Behavioral & Psychological Symptoms of Dementia (BPSD)*, Other Conditions Overlap and Interact

*Behavioral and psychological symptoms of dementia include apathy, psychosis, depression, disturbed sleep, “sundowning,” aggression, and agitation.

## Prevalence of Dementia-related Psychosis

- Affects about 2.4 million people in the United States
- Dementia-related psychosis occurs in greater than 1/2 of patients during the course of their disease
- The prevalence of psychosis depends on the underlying disease:

<table>
<thead>
<tr>
<th>Type of Dementia</th>
<th>Estimated Number with Dementia in US</th>
<th>Hallucination Prevalence (Range, %)</th>
<th>Delusion Prevalence (Range, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewy Body</td>
<td>430,000</td>
<td>55-78</td>
<td>40-57</td>
</tr>
<tr>
<td>Parkinson’s Disease</td>
<td>320,000</td>
<td>32-63</td>
<td>28-50</td>
</tr>
<tr>
<td>Alzheimer’s</td>
<td>5,800,000</td>
<td>11-17</td>
<td>10-39</td>
</tr>
<tr>
<td>Vascular</td>
<td>1,600,000</td>
<td>5-14</td>
<td>14-27</td>
</tr>
<tr>
<td>Frontotemporal</td>
<td>80,000</td>
<td>1.2-13</td>
<td>2.3-6</td>
</tr>
</tbody>
</table>

New Clinical Definition of Dementia-related Psychosis

- International Psychogeriatric Association (IPA) workgroup recently published changes to Jeste and Finkel criteria:

<table>
<thead>
<tr>
<th>A. Characteristic Symptoms</th>
<th>B. Primary Diagnosis</th>
<th>C. Chronology of Symptom Onset</th>
<th>D. Duration and Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of 1 or more of the following symptoms: -Visual or auditory hallucinations -delusions</td>
<td>All criteria for dementia are met</td>
<td>Evidence from patient history indicates that the symptoms defined in A have not been present prior to diagnosis of dementia</td>
<td>Symptoms defined in A have been present at least intermittently for 1 month or longer and severe enough to disrupt functioning</td>
</tr>
</tbody>
</table>

New Clinical Definition of Dementia-related Psychosis

- IPA workgroup recently published changes to Jeste and Finkel criteria:

<table>
<thead>
<tr>
<th>E. Exclusion of Schizophrenia and Related Psychotic Disorders</th>
<th>F. Relationship to Delirium</th>
<th>G. Exclusion of Other Causes of Psychotic Symptoms</th>
<th>Associated Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have never met criteria for schizophrenia, schizoaffective disorder, or mood disorders with psychotic features</td>
<td>The disturbance does not occur exclusively during the course of delirium</td>
<td>Disturbance is not better accounted for by another medical condition or effects of a substance</td>
<td>Specify if disturbance is associated with:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-agitation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-negative symptoms</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>-depression</td>
</tr>
</tbody>
</table>

Outcomes for Residents with Dementia-related Psychosis

• **Predictive of progression to long-term care setting and mortality** (Magni et al., 1996)

• When hallucinations and delusions are present, individuals have **significantly greater rates of cognitive decline and functional decline** (difficulty with Activities of Daily Living (ADLs)) (Karameh et al., 2019)

• **Can be highly distressing** for both persons with dementia and their care partners (Donaldson et al., 1998)

• **Negatively impacts quality of life** and personal relationships. (Brandt et al., 2020)

• **Over 2/3 of professional caregivers report emotional exhaustion** (Duffy et al., 2005)


Part B. Case Study on Making an Accurate Diagnosis

Alexis Eastman, MD
Case Study: Mrs. Jones, a Resident Experiencing Psychosis

- 87-year old female with hypertension, hypothyroidism, late-onset Major Neurocognitive Disorder, probable Alzheimer’s disease
- Lives at Sunnycreek Skilled Nursing Facility; Previously cared for at home by husband, who is her healthcare power of attorney
- At baseline, she is very sociable, interacts with staff, regularly attends ice cream socials to socialize with other residents
- In the past 6 weeks, she repeatedly claims to see a strange man in her room, usually in the evenings, rummaging through her belongings and stealing things. Staff have confirmed that there is no one entering or exiting the room when Mrs. Jones claims to see a man, and family confirms she has no history of past trauma that might trigger these episodes. Because of these ‘visits’, Mrs. Jones is in a continually frightened state and cannot be reassured
- Last week, she claimed to see the same man outside dining room window and threw plate of food at him
- Staff calls husband and arranges for the resident’s Primary Care Provider (PCP), Dr. Price, to visit Mrs. Jones
Case Study: PCP Examines Mrs. Jones

- During the visit, Dr. Price sees a very different Mrs. Jones than she is used to:
  - Anxious;
  - Avoids eye contact;
  - Fidgets and is physically restless; and
  - Talks to someone in the corner of the room who isn’t there

- Dr. Price reviews Sunnycreek’s chart:
  - Vitals and weights appear fine
  - Limited notes about Mrs. Jones’ hallucinations and the non-pharmacologic approaches tried by staff

- Dr. Price reviews medications:
  - Appropriate dose of Angiotensin-converting-enzyme inhibitor, thyroid medication, and a cholinesterase inhibitor
  - No recent use of PRN medications (e.g., sedative, antihistamine)

- Dr. Price considers possible environmental and physical triggers:
  - Light/shadows in Mrs. Jones’ room, external noise, unmet needs (hunger, pain, toileting)
Case Study: PCP Conducts Diagnostic Evaluation

1. Dr. Price reviews medical history:
   - Dementia, probable Alzheimer’s disease type, hypothyroidism
   - Husband reports no hallucinations in the past

2. In consult with the nursing home pharmacist, Dr. Price reviews current medications to identify possible medication side effects from potentially inappropriate medications in individuals with dementia, including those listed in the American Geriatrics Society Beers Criteria®:
   - E.g., anticholinergics, benzodiazepines, sedative hypnotics, and antipsychotics

3. Conducts physical exam to identify underlying medical conditions causing delirium such as infections (e.g., urinary tract infection, upper respiratory infection), as well as pain
Case Study: PCP Conducts Diagnostic Evaluation

4. Dr. Price obtains the following labs (which were negative):
   - Complete metabolic panel
   - Complete blood count
   - Thyroid stimulating hormone test
   - Urinalysis

Dr. Price concludes that Mrs. Jones’ current medications are safe and there is no evidence of delirium

5. Differentiates from other clinical syndromes which may present with hallucinations and delusions (e.g., delirium, schizophrenia, psychotic depression)
   - Careful evaluation of timing, course, prior psychiatric history, potential inciting events, other signs/symptoms

6. Result of comprehensive evaluation: Mrs. Jones’ hallucinations/psychosis are due to her dementia
Part C. Dementia-related Psychosis in Long-term Care: Evidence-based Care Strategies

Susan Scanland, MSN, CRNP, GNP-BC
Case Study: Use of Non-pharmacologic Strategies

- Dr. Price advises staff to add non-pharmacological approaches to Mrs. Jones’ individualized care plan to alleviate the anxiety caused by the hallucinations.
  - Staff creates a playlist with Mrs. Jones’ favorite Frank Sinatra and Dean Martin songs.
  - Unit nurse manager encourages staff to use Validation Therapy to communicate with Mrs. Jones when her hallucinations are present.
  - CNAs start lavender aromatherapy early each evening and offer hand massages at bedtime.

- Systematic reviews of non-pharmacologic interventions for BPSD reveal music therapy and formal communication techniques impact physical, verbal, and ADL-related agitation in dementia (Dyer et al., 2018; Abraha et al., 2017). Many other non-pharmacological techniques have been helpful; despite lack of strong evidence in research (Validation Therapy, reminiscence, aromatherapy, massage and others).


Case Study: Use of Non-pharmacologic Strategies

• Music playlists and Validation Therapy improve Mrs. Jones’ daytime behaviors moderately over the next week.

• Despite aromatherapy and bedtime hand massages, night-time psychosis worsens:
  o Visual hallucinations of people in her room who are now carrying knives
  o Delusion that her mother is still alive (now crying out for her help)
  o Delusions that staff are strangers trying to poison her with evening medication

• At 3:00 am, staff find Mrs. Jones screaming that she needs to escape from the “knife people.” Despite attempts by staff to calm her with non-pharmacologic approaches, she remains distressed.

• Staff call Dr. Price to inform her that Mrs. Jones’ hallucinations and delusions are worsening, and that non-pharmacologic strategies have not significantly affected her condition and quality of life.
Case Study: Use of Pharmacologic Therapy

• Dr. Price recommends starting Mrs. Jones on an atypical antipsychotic.

• Dr. Price educates the staff about the need to continue to provide and monitor the medication since impact on delusions and hallucinations usually takes several days.

• The hallucinations appear to decrease and Mrs. Jones seems less distressed. Now that she is on the medication, she is more responsive to music calming her. She looks forward to hand massages at bedtime and relaxes until she falls asleep with the lavender aromatherapy.

• Staff document in their log that after a week, episodes of Mrs. Jones seeing shadowy, threatening figures has decreased by 50 percent.
Case Study: Use of Pharmacologic Therapy

• Dr. Price discusses with Mr. Jones the risk-benefit ratio of continuing his wife on the atypical antipsychotic. Dr. Price reviews black box warning for current atypical antipsychotics which includes increased risk of mortality.

• After 5 months of observation and documentation, Mrs. Jones ceases to have delusions and hallucinations.

• Given this and concerns about side effects, Dr. Price gradually begins a Gradual Dose Reduction (GDR) of the atypical antipsychotic.

• Dr. Price informs nursing staff of Mrs. Jones’ care plans. Staff will continue to monitor for potential reoccurrence of hallucinations and delusions (Devanand et al., 2012) and will document these in the Electronic Medical Record (EMR).

Part D. Tips for Documentation and Ongoing Monitoring

Chad Worz, PharmD, BCGP
Documentation of Provision and Effectiveness of Care

• Documentation underpins the treatment rationale for residents in skilled nursing facilities as well as in other health care environments

• **What is not documented, is not done**

• Documentation is important in demonstrating effectiveness of person-centered interventions, limited evidence exists for specific non-pharmacologic interventions but the relative safety and importance of them as first steps in person-centered approaches to care is clear (AHRQ 2020)

• Due to the nature of BPSD and the mixed evidence about the safety and efficacy of psychoactive medications, documentation is *important in demonstrating effectiveness of care*:
  
  o Careful tracking of changes in behavior
  
  o GDR (two attempts in the first year)
  
  o Documented clinical indications or evidence of use for psychoactive medications

Tips for Documentation

• The priority is to **have a plan** and to add interventions to the resident’s individualized care plan

• **Use multiple disciplines** in the planning and ongoing monitoring process for the use of non-pharmacologic approaches to care, as well as medications in residents with dementia experiencing psychosis and/or agitation

• **Set appropriate expectations** regarding impact of medication with resident and family
Tips for Documentation

Need to appropriately document:

1. **Current care environment and medication regimen is free of triggers that contribute to symptoms** or the condition being addressed

2. **Rationale** underlying why both pharmacologic and non-pharmacologic approaches may be used or maintained
   - Allowance that it could be a chronic and/or progressive condition that requires ongoing treatment

3. **Objective clinical benefits**: progression/frequency of targeted symptoms

4. **Objective clinical adverse risks**: progression/frequency of specific adverse effects
Tips for Ongoing Monitoring

• Recognize and understand signs and symptoms of psychosis documented in the medical record and Minimum Data Set

• **Document changes over time** in the EMR specific to the use of each psychoactive medication (antipsychotics)

• Continually **communicate with family** about any adjustments to medication regimen and changes in resident’s condition

• **Continually evaluate and document the safety and efficacy** of non-pharmacologic approaches to care and each psychoactive medication, as well as the ongoing treatment plan
  o Use of multiple psychoactive medications and impact on GDR schedule
  o Use of evidence-based medications without U.S. Food & Drug Administration-approved indications
  o When GDR is clinically contraindicated:
    ▪ Chronic, progressive disease
    ▪ Resident is considered at risk
    ▪ When GDR increases clinical symptoms/issues (failed GDR)
Question & Answer Session
For any questions to the presenters, please email Judit Illes, BCL/LLB, MS, Director of Strategic Alliances, GSA at jilles@geron.org

Documentation Resources:

• See CMS resource on “Unnecessary Medications, Psychototropic Medications, and Medication Regimen Review Critical Element Pathway” at Long-term Care Survey Critical Element Pathways

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Contact the National Partnership:

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