Psychotic Disorders in the Elderly

George T. Grossberg, MD
Samuel W. Fordyce Professor
Director, Geriatric Psychiatry Program
Department of Psychiatry
St. Louis University School of Medicine
St. Louis, Missouri

Presentation Architecture
I. Defining Psychosis
II. Prevalence
III. Differential Diagnosis
   A. Primary vs Secondary vs Mixed Psychotic Disorders
IV. Treatment
   A. Non-pharmacologic and Pharmacologic
   B. Antipsychotic Controversy
V. Conclusions

Defining Psychosis

• Delusions – firm false beliefs not in keeping with reality/patient's cultured beliefs
• Hallucinations – perceptions in absence of stimuli
  – Visual – Most common in elderly
  – Auditory
  – Olfactory, tactile, gustatory

Defining Psychosis (continued)

• Catatonic/Bizarre behaviors
• Emotional suffering and impairment in daily functions = "clinically significant psychotic disorder"

Prevalence of Psychosis in Elderly

• 0.2% to 5.7% in community
• 10% in nursing homes
• Older adults have higher incidence than younger adults
• 30% to 50% in AD
  – Can occur at any stage – even prodromal (AD)

Risk Factors for Psychotic Symptoms in Elderly

• Cognitive impairment
• Sensory deficits, esp. sudden auditory
• Female gender
• Social isolation
• Premorbid personality, eg, paranoid, schizoid
• Polypharmacy/substance abuse
• Bedridden status

AD = Alzheimer's disease.
### Psychotic Symptoms in Long-Term Care

- Common and independently predict functional decline
- Psychotic symptoms in delirium and dementia – most common
- In dementia – psychotic symptoms are associated with:
  - Increased risk of LTC admit
  - Increased mortality

**LTC** = long-term care.

### Differential Diagnosis of Psychotic Disorders

- Primary psychotic disorders
- Affective psychoses – MDD with psychosis; bipolar disorder with psychosis
- Schizophrenia; schizoaffective disorder: unipolar and bipolar
- Delusional disorder
- Brief psychotic disorder
- Hallucinations during grief

**MDD** = major depressive disorder.

### Secondary Psychotic Disorders

- Dementia with psychotic symptoms (AD, DLB)
- Delirium with psychotic symptoms
- Medication-induced psychotic symptoms
- Parkinson’s disease with psychotic symptoms
- General medical disorders causing psychotic symptoms
- Illicit drugs and/or alcohol related psychotic symptoms

**DLB** = dementia with Lewy bodies.

### Primary Psychotic Disorders

- Serious disorders associated with
  - High morbidity
  - Risk of suicide
  - Increased mortality
- Mostly older adults with schizophrenia
- Led to OBRA regulations of 1987
  - Preadmission screening and resident review (PASRR)

**OBRA** = Omnibus Budget Reconciliation Act.

### Primary Psychotic Disorders (continued)

- If symptoms severe – may need psychiatric hospitalization due to agitation/aggressivity/risk of suicide

### Psychosis of Alzheimer’s Disease

- Meets DSM criteria for DAT
- Presence of visual or auditory hallucinations or delusions at least intermittently for ≥ 1 month
- Psychosis not present prior to dementia diagnosis
- Psychotic symptoms are severe – causing disruption in functioning for patients or others’ functioning

**DAT** = dementia of Alzheimer’s type.
### Psychotic Symptoms in Non-AD Dementias

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>VaD – 9% to 40%</td>
<td>Paranoid psychosis</td>
</tr>
<tr>
<td>Complex delusions</td>
<td>More common in VaD vs AD</td>
</tr>
<tr>
<td>DLB – 75%</td>
<td>Recurrent visual hallucinations – occur early in course of DLB vs mid-late stage in AD</td>
</tr>
</tbody>
</table>

**VaD** = vascular dementia


### Psychotic Symptoms in Non-AD Dementias (continued)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 50% with DLB</td>
<td>Have delusions (persecution, infidelity, Capgras syndrome)</td>
</tr>
<tr>
<td>Psychotic symptoms rare</td>
<td>in FTD</td>
</tr>
</tbody>
</table>

**FTD** = frontotemporal dementia


### Delusions in Dementia

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are simple (my home is not my home; people stealing things, marital infidelity, Capgras Syndrome – esp. DLB)</td>
<td></td>
</tr>
<tr>
<td>Often see delusions of misidentification, misperception</td>
<td></td>
</tr>
<tr>
<td>Complexity of delusions decreases with increased cognitive impairment</td>
<td></td>
</tr>
<tr>
<td>Delusions may trigger agitation</td>
<td></td>
</tr>
</tbody>
</table>

Josephs KA. Arch Neurol. 2007;64(12):1762-1766.

### Hallucinations in Dementia

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual hallucinations</td>
<td>Most common, then auditory</td>
</tr>
<tr>
<td>– Persons from past, animals, intruders</td>
<td></td>
</tr>
<tr>
<td>Auditory hallucinations</td>
<td>Usually simple—hearing deceased relatives</td>
</tr>
<tr>
<td>– Rarely persecutory</td>
<td></td>
</tr>
</tbody>
</table>


### Hallucinations in Dementia (continued)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients with advanced dementia—visual hallucinations</td>
<td>May: reach out to touch imaginary objects</td>
</tr>
<tr>
<td>Hallucinations may trigger agitation—especially if frightening</td>
<td></td>
</tr>
</tbody>
</table>
Treatment of Psychotic Symptoms in Dementia

- Careful evaluation and treatment of underlying medical problems, eg, UTI
- Identifying offending medications
- Identifying environmental/psychosocial triggers

UTI = urinary tract infection.

Treatment of Psychotic Symptoms in Dementia (continued)

- Psychosocial/environmental interventions should always be tried first
- If imminent danger to self or others—hospitalize in acute geriatric psychiatry unit


Indications for Antipsychotics

- Psychotic symptoms causing severe emotional distress and not responding to psychosocial/environmental interventions
- Psychotic symptoms pose a high safety risk for patients or others

“The excessive prescription of antipsychotic drugs in nursing homes is elder abuse, plain and simple. It is chemical restraint, as pernicious and predatory as unnecessary physical restraints.”

—Senator Richard Blumenthal (D-Conn)

The Improving Dementia Care Treatment in Older Adults Act (S 3604) – 2012

The bill provides “steps that will help decrease the improper, dangerous, and costly use of antipsychotics and accelerate the shift toward the broader use of safer alternatives.”

—Senator Herb Kohl (D-WI)

Concerns Relative to Use of Antipsychotics in Nursing Homes

- Safety concerns including increased mortality
- Often used first-line for treatment of BPSD
- Limited evidence for efficacy

BPSD = behavioral and psychotic symptoms of dementia.
Concerns Relative to Use of Antipsychotics in Nursing Homes (continued)

• CATIE study: “Adverse effects offset advantages in the efficacy of atypical antipsychotics for the treatment of psychosis, aggression or agitation in patients with [AD].”

• Cost

CATIE = Clinical Antipsychotic Trials of Intervention Effectiveness.

How to Use Antipsychotics in Dementia

• Pick antipsychotic based on side effects

• Start low, go slow—except in out-of-control patients, where patient/staff safety paramount

• Atypicals preferred. Haloperidol may be useful in emergency situations

• Keep in mind that “Black Box Warning” applies to all antipsychotics, old and new

How to Use Antipsychotics in Dementia (continued)

• Discuss risk/benefit of using antipsychotics in dementia with family, if possible, and document

• Goal is not to resolve psychotic symptoms, but to reduce patient agitation and distress and reduce behaviors dangerous to patient and others

Personal Observations

• Psychosis in AD may not be the same as psychosis in schizophrenia – neuro-anatomically and neuro-chemically

• Neuroleptics (used to be called: “major tranquilizers”) are more effective for treating agitation in AD than psychosis

Personal Observations (continued)

• AD patients who have a good response to antipsychotics relative to psychosis and agitation should be maintained on treatment for 1 year or longer due to high risk of relapse

Other Conditions Associated with Psychosis in the Elderly

• Parkinson’s Disease/PD Dementia
  – Usually visual hallucinations
  – Psychotic symptoms may be due to anti-PD Rx

• Low-dose clozapine (25–50 mg hs) has best evidence, but not first line

• New drug pimavanserin recently FDA approved (April 2016) for PD Psychosis only—is a 5-HT2A inverse agonist/antagonist


### Delirium with Psychotic Features

- Any/all causes of delirium can be accompanied by psychotic symptoms
- Visual hallucinations and illusions most common
- Treatment: Identifying and treating cause
- Short-term use of antipsychotics for severe agitation/aggression – to get the patient under control and buy time to identify cause may be useful

### Other Considerations

**Psychotic symptoms secondary to general medical disorders**

- Examples include: UTI, electrolyte imbalance, thyroid, dehydration, sleep apnea, epilepsy, brain tumor, stroke, TBI

### Other Considerations (continued)

**Medication induced psychotic symptoms**

- Examples include: Anti-PD Rx, anticholinergics, benzodiazepines, steroids
- Withdrawal from benzodiazepines and sedative-hypnotics

### Alcohol and Street Drugs

- Alcohol: Acute intoxication and withdrawal states
- Street drugs: Cocaine, cannabis; Urine drug screen important

### Conclusion

- Psychotic disorders and symptoms in the elderly are common and a significant source of distress/disability for patients and family
- Psychotic symptoms are associated with increased morbidity and mortality
- Psychotic symptoms may trigger agitation and aggressivity and may pose a danger to others

### Conclusion (continued)

- A thorough assessment (including risk of suicide) and treatment of underlying reversible causes (if found) is the first step
- Psychosocial-environmental interventions are often effective
- Targeted pharmacological interventions may be necessary, effective, and even life-saving

_TBI = traumatic brain injury._