NORTHWEST GERIATRIC EDUCATION CENTER

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Spring 2013 Geriatric Health Lecture Series on Alzheimer's Disease and Related Issues

Psychosis in Older Adults: The Antipsychotic Dilemma

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Learning Objectives

By the end of this lecture, you should be able to:

- Identify the major differential for psychotic symptoms presenting in the geriatric population.
- Develop an initial treatment plan for targeting the symptoms of psychosis.
- Discuss the major risks associated with the use of antipsychotics in the geriatric population.

A non-508-compliant streaming video of this lecture and related self-test is available on the NWGEC website (Psychosis Online Lecture, http://nwgec.org/educational-opportunities/lectures/online-videos/psychosis).

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Psychosis in Older Adults: the antipsychotic dilemma

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Goals and Objectives

- Review the definition of psychotic symptoms
- Discuss the differential diagnosis of psychosis in older adults
- Discuss when and if to treat psychotic symptoms with antipsychotic medications
- Review the risks of antipsychotic medications
- Discuss additional resources

Have you ever been psychotic?

- Delusions
  - Fixed false beliefs immutable in the face of refuting evidence
- Hallucinations
  - Perceptions that occur in the absence of corresponding sensory stimuli
  - Can be in any sensory domain
  - Auditory and visual are most common
  - Visual hallucinations often suggest organic cause
  - Not illusions (where there is an acutal stimulus)

Why is the differential important?

- Risks and benefits of antipsychotics
- Different diagnoses=different treatment
- Types of support needed
- Course of treatment (short term vs. long term)
- Psychosis is often the term misused to describe non-psychotic behavioral syndromes

You are a detective

- Who?
- What?
- Why?
- Where?
- When?

Initial History
Who?

- Patient demographics and social situation
- Is the patient concerned? Family? Other?
- Is there any prior history?

Initial History
What?

- Description of behavior/signs/symptoms: is it psychosis?
- Were there other concerns before the onset of the presenting problem?
- What has been done so far to evaluate and treat the problem? Has it helped?

Initial History
Why and When?

- Why presenting now for evaluation?
- When did it start?
  - Acute/chronic with worsening
  - Temporal association with medical issue, change in social circumstances, medication changes

Initial History
Where?

- Where do they live and with whom?
- Is their placement at risk?
- Is someone at risk where they live?
- Do the symptoms occur only in one place or more globally?

Case 1

- 83 year old woman living independently
- Presents for evaluation of "psychosis"
- Obtain any prior workup/collateral before you see patient if possible
- Ask patient and family to bring in FULL list of medications including over the counter meds
- Be aware of all players in medical care

Case 1

- Information to obtain as part of ongoing evaluation:
  - Medication list and sense of compliance
  - Lab results, head imaging results
  - Collateral (ED visits, social work, family/caregiver concerns)
  - If you get hospital records, review nursing and other notes—yes, we read them!
  - Ask about substance use and OTC meds

Differential Diagnosis of Psychosis in Older Adults

- Delerium
- Secondary to general medical condition
- Substance-induced but not delerium
- Dementia
- Mood disorder with psychotic features
- Delusional disorder
- Schizophrenia—chronic or late-onset

Delerium

A. Disturbance of consciousness with reduced ability to focus, sustain, or shift attention
B. A change in cognition or perceptual disturbance not accounted for by preexisting dementia
C. Develops over short period of time (hours to days) and tends to fluctuation over a day
D. Evidence that the disturbance is a direct physiological consequence of a general medical condition

Delerium

- Can be superimposed on underlying dementia
- Can be a red flag for identifying dementia not previously recognized
- Search for etiology and try to treat/manage
- When underlying dementia, may take longer to clear from delerium
- Do not diagnose dementia until after delerium reasonably cleared and cognition reassessed

Case 1

- Pt calling family reporting someone breaking into her home and stealing things
- Past medical history: well-managed hypertension, osteoporosis
- Meds: atenolol, calcium, high-dose vitamin D
- Imaging: non-contrast head CT: mild atrophy
- Husband died 6 months ago, just moved to area
- Electricity in danger of being shut off due to nonpayment of bill and overdraft notices from bank

Important questions

- Has family noted any other cognitive symptoms? (memory, word-finding, getting lost)
- General mood and outlook and recent changes
- Condition of home and personal care
- Refilling meds appropriately? CHECK
- Past history of mood disorder or psychosis?
- What does patient present as evidence people are breaking in? (hallucinations, missing items)

Case 1

- Mood has been ok after husband's death until worries about theft
- Short-term memory problems, trouble finding words, less active socially for a few years
- Has made several calls to police
- Sleep disturbed, fears for own safety
- "Stolen" items sometimes turn up later

Types of dementia

- Alzheimer's disease
- Vascular dementia (formerly multi-infarct dementia)
- Dementia with Lewy bodies
- Secondary to other medical conditions
- Frontotemporal dementia

Dementia: DSM

A. Memory impairment

B. One or more additional deficits:

- aphasia (language disturbance)
- apraxia (impaired motor ability with intact motor functioning)
- agnosia (failure to recognize or ID objects despite intact sensory functioning)
- deficits in executive functioning

Alzheimer's Disease

- Psychosis typically presents in the mid stages of the disease—estimated MMSE in the mid teens
- More than 50% of AD patients experience psychosis

Alzheimer's disease

- Delusions most common-typically simple, nonbizarre, paranoid
- Common themes:
  - Theft
  - Caregiver is an imposter (Capgras syndrome)
  - Abandonment/infidelity
  - Home is not home (relocation)
- Hallucinations

Vascular dementia

- Stepwise decline in cognitive functioning and typically associated with focal neurologic deficits
- Stroke yields a 9-fold increase in dementia risk
- Memory impairment often delayed
- Delusions more common than in AD
- No association of psychosis with severity of dementia unlike with AD (i.e. can occur early)

Dementia with Lewy Bodies

Core Features:

2 for probable, 1 for possible

- visual hallucinations
- parkinsonism
- fluctuation in alertness or attention and cognition (may look like delerium)

Dementia with Lewy Bodies

Supportive features:

- repeated falls
- syncope
- neuroleptic sensitivity
- delusions
- hallucinations in other modalities

May not show early memory decline, but typically occurs early (within a year)

Dementia with Lewy Bodies

- May be on a continuum with Parkinson's disease
- Sensitive to neuroleptics/antipsychotics
  - Gold standard: clozapine
  - Practical agent: quetiapine
- REM sleep behavior disorder may be associated
- Hallucinations are sometimes described as nondistressing—may not require medication
- Capgras/phantom boarder delusions common

DLB vs. PDD

- Both may have visual hallucinations and delusions
- Psychosis (e.g. visual hallucinations) can occur with no meds in DLB
- In PDD, psychosis may be related to dopamine treatment vs. DLB
- Cognitive impairment early DLB, later in PDD

Frontotemporal Dementia

- Onset earlier than most dementias (50s and 60s)
- Change in personality/behavior common
- Memory impairment not as prominent early
- Psychosis is rare

Case 1

- Patient finds things moved or missing
- Has never seen or heard anyone but finds door open (no hallucinations)
- No history of stroke
- Takes no over the counter medications
- No substance use
- Sometimes forgets to take her medications
- No prior psychiatric history

Case 1

- Folstein MMSE score: 17/30 (college grad)
- Geriatric depression scale score subthreshold for depression, but shows signs of distress
- Patient reports she is so upset "I'd kill someone if I thought they were stealing from me!"
- Beginning to think her family is involved because they aren't helping her catch the person
- Family getting concerned calls from police, building manager

Psychosis in dementia Treatment

- Mild
  - Staff, family, and patient education
  - Identify fears and discuss with patient
  - Structured activities, decreased time alone
- Behavioral problem or distress of patient
  - Low dose atypical antipsychotics
    - One fourth to one half the doses used in primary psychotic disorders
    - Increase activity to engage them

Psychosis is stressful and scary

- Greater caregiver burden and distress
- Linked with anxiety, agitation, and aggression
- Predictor of functional decline and institutionalization
- Often impacts quality of life

Dilemma of antipsychotics

- Some efficacy in clinical trials
- High burden of side effects—EPS, falls, sedation, metabolic syndrome, tardive dyskinesia
- Black box warning for increased mortality in dementia
- Cannot predict who will respond
- Cost
- Olanzapine (5-7.5 mg), risperidone (1-1.5 mg), quetiapine (to 150 mg) with strongest evidence

Case: Treatment

- Education provided to family and patient on dementia
- Recommended Alzheimer's Association for information and support about dementia
- Started risperidone 0.25 mg at bedtime after informed consent re: black box warning
- Discussed medications for dementia treatment
- Recommended senior center, adult day program

Case 1: Treatment

- No response of distress to 0.25 mg qhs
- Titrated dose over time to 0.75 mg qhs with decrease in delusions of theft
- Patient agrees to spend time out of house with family and at adult day program
- Patient agrees to move to ALF
- Patient and family decline acetylcholinesterase inhibitor/memantine due to level of dementia
- Tapered successfully after 4 months of no symptoms

Delusional Disorder

- Criteria A
  - Non-bizarre delusion for at least 1 month (things that can happen in real life)
- Criteria B
  - Criteria A for schizophrenia have never been met (olfactory and tactile hallucinations ok if related to delusion)
- Criteria C
  - Apart from delusion, functioning not impaired and behavior is not odd or bizarre
- Criteria D if mood symptoms present, brief
- Criteria E not related to substances/medical condition

Delusional Disorder-Late Onset

- More common in women (like schizophrenia)
- Often previously married
- Premorbid functioning good: often have been employed
- Sensory impairment common

Treatment

- Establishing repoire and nonconfrontational engagement (good for all psychotic disorders)
- Gather collateral history
- Family or caretaker support
- Antipsychotics
  - Use of atypical agents first line
  - If agreeable, consider depot medication (often stop medication if have had a response)

Aging in Early Onset Schizophrenia

- Increasing side effects from medications
  - Tardive dyskinesia
  - Other extrapyramidal symptoms (parkinsonism)
  - Falls
- Increased cognitive deficits
- Increased IADL and ADL deficits
  - More non-psychiatric hospitalizations
  - Need for ALF, AFH, or SNF care, payee, in-home assistance, transportation

Case 2

- 83 year old widowed woman living alone, retired administrative assistant
- No prior psychiatric history
- PMH: hypertension and osteoporosis
- Meds: calcium+D, atenolol, multivitamin
- New onset delusion under surveillance by U.S. Government
- Auditory hallucinations of multiple voices threatening her/talking to each other

Case 2

- Sleep disturbance due to voices zapping her with rays on her legs at night
- Voices ("people") can see into purse/checkbook
- Thinks voices read over her shoulder—stopped reading
- Voices tell her to give them money to go away
- Had UTI at presentation---treated w/levaquin
- Extensive medical workup otherwise negative
- Hearing and vision impairment

Case 2

- Distressed: anxious, tearful
- no IADL/ADL deficits (collateral from daughter)
  - Not using checkbook was related to delusions
- Geriatric depression scale 4/15 (subthreshold)
- Mini-cog 4/5 (later MMSE 22/30 off meds to 28/30 on medication)
- Quetiapine to 50 mg→"zombie, no energy"
- Olanzapine→unknown dose "muscle tightness"

Late Onset Schizophrenia

- After age 40
  - Hallucinations tend to be auditory or visual
  - Delusions usually bizarre (not likely to be possible)
  - Persecutory delusions with a change in behavior or function
- After age 60—sometimes termed very late onset
  - Hallucinations in other modalities increase (olfactory, tactile, visual) but AH possible
  - Less thought/behavior disorganization and affective flattening

Late Onset Schizophrenia

- More common in women (10:1)
  - Possibly hormonal link
- Premorbid history usually higher functioning
  - Often marry, have had children, were employed
- Sensory deficits common
- Hallucinations in non-auditory modalities not uncommon
- Seems less genetically linked as less family history of psychosis

Schizophrenia Treatment

- Assistance with IADL support even when cognition minimally impaired
  - Transportation
  - Medication monitoring/compliance
  - Payee
  - Designate DPOA for future needs
  - Chore support

Schizophrenia Treatment

- Low dose typical antipsychotic medications
  - Inexpensive
  - May have more liability for tardive dyskinesia
- Atypical antipsychotics
  - May better alleviate negative symptoms
  - Theoretically reduced tardive dyskinesia (but not no risk)
  - Expensive (risperidone and olanzapine generic now)
  - Less study in elderly patients for new agents

Case 2: treatment

- Started on risperidone 0.5 mg qhs
- Titrated to 1 mg and eventually as high as 2 mg
- Self-decreased dose to 1.5 mg qhs due to slowed cognition, low energy, gait instability
- Dose reduced to 1 mg then 0.75 mg with stable symptoms—last seen in January 2011 doing well
- Now lives with daughter
- MOCA was 21/30 in August 2010 on meds
- Never regained prior level of activity

Treatment Choice

- Most likely diagnosis/diagnoses
- Incorporate non-pharmacologic strategies before or in addition to medication
- Measurable target symptoms
- Co-morbid medical conditions
- Potential drug interactions
- Cost and formulary restrictions
- Route of delivery needed now and future

Choice of antipsychotic

- Prior trials and response/side effects
- Co-morbid medical conditions
- Cost
- Need for alternate route of delivery (e.g. depot)
- Short-term or long term (dictates length of use rather than choice of agent)
- Monitor for tardive dyskinesia and other EPS

ANTIPSYCHOTICS GERIATRIC DOSING

	Initial (mg/day)	Est. therapeutic Dose
Risperidone	**1**	**2-3**
Olanzapine	**5**	**10-15**
Quetiapine	**50**	**150-300**
Aripiprazole	**5-10**	**15-30**
Haloperidol	**1**	**5-10**
Ziprasidone (IM)	**10mg Q 2hr x 2)**	**-------**
Ziprasidone (PO)	**20 w/food**	**80-160?**

Expert Consensus Panel for using Antipsychotics in Older Pts
Alexopoulos GS et al. J Clin Psych 2004:65 Suppl 2: 5-99
First line = Risperidone
Second line = Olanzapine, Quetiapine, Aripiprazole

Second line Antipsychotic in Older Adults

	Initial (mg/day)	Est. therapeutic Dose
Haloperidol	**1**	**5-10**
***EPS/TD**		
Ziprasidone (IM)	**10mg Q 2hr x 2)**	**-------**
***QTc/Arrythmia**		
Ziprasidone (PO)	**20 w/food**	**80-160?**
***QTc/Arrythmia**		

* = Concerns leading to recommendation
For limited use in Older Adults

Treatment Course

- Assess response of identified target symptoms
- Reconsider choice/diagnosis if ineffective or intolerable side effects
- Identify if short or long term treatment needed
- Gradual dose reduction where appropriate depending on response
- Monitoring for side effects such as parkinsonism, tardive dyskinesia, metabolic

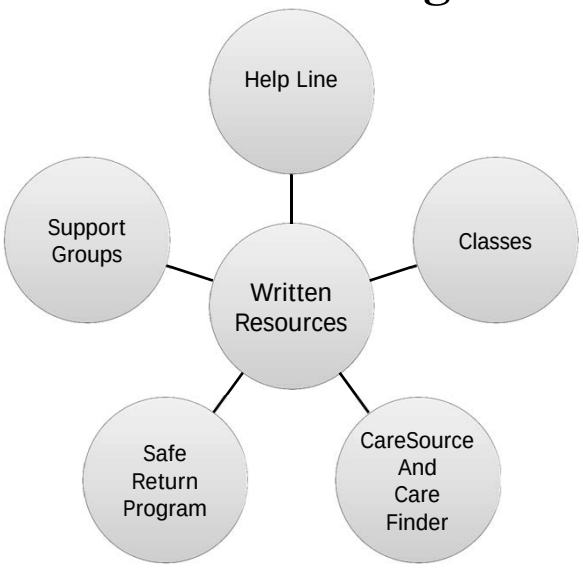
Patients, Families, and Caregivers

- Identify fears
- Listen to their concerns and preferences
- Education
- Give reassurance
- Recognize caregiver depression and burnout
- Resources for support and training
- Anticipatory guidance of placement

Resources

- Alzheimer's Association: www.alz.org
- Family Caregiver Alliance: www.caregiver.org
- The 36 Hour Day by Nancy L. Mace, M.A. and Peter V. Rabins M.D., M.P.H.
- Evergreen Geriatric Regional Assessment Team (GRAT)—King County: www.evergreenhospital.org/grat
- NAMI (National Alliance for the Mentally Ill): www.nami.org
- NIMH (National Institute for Mental Health): www.nlm.nih.gov/medlineplus/mentalhealth.html

Alzheimer's Association www.alz.org



Recent Reviews

"Atypical Antipsychotic Use in Patients With Dementia: Managing Safety Concerns"

Steinberg M, Lyketsos C. Am J Psychiatry 2012; 169:9; 900-906

"New Wine in Old Bottle: Late-life Psychosis"

Iglewicz A, Meeks T, et al. Psychiatr Clin N Am 2011; 34; 295-318

Evaluating Psychosis

- Is it psychosis?
- Medical history and evaluation
- Acute vs. subacute with worsening vs. chronic
- History of cognitive impairment
- History of prior presentation with same symptoms
- Is it causing distress or danger to patient, danger to others, or is placement at risk?

When to refer to a geriatric specialist

- Complex medical issues in decisions about medications
- Refractory to initial agents tried
- Diagnostic uncertainty

Take Home

- Psychosis is a common manifestation of dementia
- Dementia is not the only etiology of psychosis in the geriatric population but is one of the more common
- Identify targets within the behavioral syndrome to inform best treatment choice and monitor outcomes
- Co-morbidities and side effects are common: start low, go slow
- Informed consent, reassess ongoing need for meds