Psychosis, Delirium, Dementia

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Intentions and Limitations of Training

Introduction
Psychosis, Delirium, Dementia
- Pathophysiology
- Impact
- Statistics
- Demographics
- Outcomes
Differentiate Psychosis, Delirium, Dementia

Asking

Right Questions
- Symptom History
- Behavior History
- Treatment History
- Family History
- Compliance History

Right People
- Patient
- Family Members
- Previous Providers
- Community Service Providers (e.g., case management thru insurance companies)

What’s Happening In The Brain
Let's see how these neurotransmitters are related, one to another...note different biochemical pathway from serotonin!

Also known as “adrenaline”

Also known as “noradrenaline”

“The pain, pleasure, and rage chemical”

Psychosis

- Gross impairment in reality testing
- Presence of hallucinations and/or delusions
- Marked disturbance in personality, with impairment in social, interpersonal, and occupational functioning
- Marked impairment in judgment and absence of understanding of presenting/current symptoms and behaviors (lack of insight)

Psychotic Disorders

- Brief psychotic disorder
- Schizophreniform disorder
- Schizophrenia disorder
- Delusional disorder
- Schizoaffective disorder
- Psychotic disorder due to medical condition
- Psychotic disorder due to medication/substance induced
Psychosis: Due to Another Medical Condition

- Typhoid Fever
- Temporal Lobe Epilepsy
- Alzheimer's Disease
- Frontotemporal Dementia
- Cortical Lewy Body Disease
- Huntington's Chorea
- Parkinson's Disease
- Brain Tumor

- Indigopathic Basal Ganglia Calcifications
- Post Traumatic Encephalopathy
- Viral Encephalitis
- Creutzfeldt-Jakob Disease
- Stroke
- Vascular Dementia
- Multiple Sclerosis
- Vitamin B12 Deficiency

Psychosis: Medication Induced Psychotic disorder

- Toxins: Phencyclidine
- Medications: Bromocriptine
- Hormones
- Withdrawal of sedatives/hypnotics/anxiolytics
- Cannabis
- Alcohol
- Amphetamines
- Cocaine

Psychosis: Hallucinations

Evaluation of Psychosis

- An important aspect of evaluation and management of patients with psychosis is the need to identify the cause of psychotic symptoms.
  - Comprehensive neuropsychiatric assessment must be completed to prioritize:
    1. Delirium, including delirium due to substance intoxication/withdrawal;
    2. Secondary psychoses of neurologic
    3. Medical
    4. Substance use disorders
    5. Mood disorders with psychotic features
    6. Schizophrenia spectrum disorders
  - Other psychotic disorders
- Patients should be involved in psychiatric, neurologic, and general medical history taking to the extent that their clinical status allows, and, when possible, collateral and corroborative history should be obtained from family members or others knowledgeable about the patient and from medical records.

Psychopharmacology for Psychosis

- **Typical Medications (1950-present)**
  1. Thorazine (Chlorpromazine)
  2. Mellaril (Thioridazine)
  3. Stelazine (Trifluoperazine)
  4. Trilafon (Perphenazine)
  5. Serentil (Mesoridazine)
  6. Prolixin (Fluphenazine)
  7. Navane (Thiothixene)
  8. Haldol (Haloperidol)
  9. Moban (Molindon)
  10. Loxapine (Loxitane)

- **Atypicals (1970-present)**
  1. Clozapine (Clozaril)
  2. Risperdal (Risperidone)
  3. Olanzapine (Zyprexa)
  4. Quetiapine (Seroquel)
  5. Ziprasidone (Geodon)
  6. Aripiprazole (Abilify)
  7. Paliperidone (Invega)
  8. Camprazine (Hayler)
  9. Brexpiprazole (Rexulti)
Side Effects of Antipsychotics

- Pseudoparkinsonism
- Acute Dystonic Reactions
- Akathisia
- Tardive Dyskinesia
- Metabolic Syndrome

Impact of Psychosis Thru Lifespan

Presentation of Psychosis Overlap
Is this Delirium or Dementia?

Delirium

- Delirium is an acute confusional state.
- A diagnosis of delirium is typically based on clinical observation of behaviors and cognition, because no diagnostic tests are available.
- The essential features of delirium include:
  - Acute onset (hours/days) and a fluctuating course
  - Inattention or distraction
  - Disorganized thinking or an altered level of consciousness (which may include hallucinations or delusions)

DSM-5 Criteria Comparison
Delirium Causes

- Infection
- Drug interactions or sensitivity
- Dehydration
- Kidney failure
- Liver failure
- Brain tumors or other head trauma
- Other physical problems

Treatment Delirium

- Unlike dementia, delirium is usually reversible if the underlying cause is treated.
- Delirium can be easily overlooked in persons with dementia because some of the symptoms of delirium are shared with dementia.
- Create a safe and soothing environment to help improve the course of delirium.
- Keep the person's room softly lit at night, turn off the television, and remove other sources of excess noise and stimulation.

Dementia

- Dementia refers to a group of symptoms that together affect the memory, normal thinking, communicating and reasoning ability of a person.
- These symptoms make it difficult to perform even daily simple tasks such as bathing and eating.
- Alzheimer's disease is the main cause of majority cases of dementia.
- Dementia can’t be cured but there are medications to manage the symptoms.
Common Forms of Dementia

Dementia: An umbrella term

- Alzheimer's Disease
- Vascular Dementia
- Frontotemporal Dementia
- Lewy Body Dementia
- Parkinson's Disease

Rule Out Other Medical Conditions:

- Neurological Disorders
- Depression and Anxiety Disorders
- Metabolic and Endocrine Disorders
- Tumors
- Infections
- Arteriovascular Disease
- Head Trauma
- Substance Abuse

Short Dementia Screening Tools for Primary and Secondary Care

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Time to use (min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini Mental Status Exam (MMSE)</td>
<td>5-10 minutes</td>
</tr>
<tr>
<td>General Practitioner Assessment of Cognition (GPCOG)</td>
<td>6 minutes</td>
</tr>
<tr>
<td>Abbreviated Mental Test Score (AMTS)</td>
<td>3-4 minutes</td>
</tr>
<tr>
<td>Clock Drawing Test</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Mini-Cog</td>
<td>3 minutes</td>
</tr>
<tr>
<td>Test Your Memory (TYM Test)</td>
<td>5-10 minutes</td>
</tr>
<tr>
<td>Memory Impairment Screen (MITS)</td>
<td>Under 5 minutes</td>
</tr>
<tr>
<td>Addenbrookes Cognitive Examination-Revised (ACE-R)</td>
<td>15-20 minutes</td>
</tr>
</tbody>
</table>

Dementia Assessment and Diagnosis

Delirium VS Dementia

- Dementia develops over time, with a slow progression of cognitive decline.
- Delirium occurs abruptly, and symptoms can fluctuate during the day.
- The hallmark separating delirium from underlying dementia is inattention. The individual simply cannot focus on one idea or task.
- Delirium often is unrecognized by healthcare professionals because changes in behavior in persons with dementia (such as agitation or sun downing) may be attributed to the dementia disease process, versus an acute problem.

Psychopharmacology for Dementia

<table>
<thead>
<tr>
<th>Treatment with cholinesterase inhibitors and memantine</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is type I evidence for the efficacy of cholinesterase inhibitors in the treatment of mild to severe Alzheimer’s disease.</td>
<td>A</td>
</tr>
<tr>
<td>There is type I evidence that memantine should not be stopped just because the patient of dementia has been removed.</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Getting between cholinesterase inhibitors</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is type I evidence to support the using of one cholinesterase inhibitors in addition to the NPI is not indicated or effective.</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Combination therapy</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is type I evidence for adding memantine to a cholinesterase inhibitor.</td>
<td>A</td>
</tr>
</tbody>
</table>
### Table 4. Summary: Lewy body dementia

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Level of evidence</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholinesterase inhibitors</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Memantine</td>
<td>B</td>
<td>B</td>
</tr>
</tbody>
</table>

**Psychopharmacology for Dementia**

### Table 5. Summary: vascular dementia

<table>
<thead>
<tr>
<th>Treatment with cholinesterase inhibitors and memantine</th>
<th>Level of evidence</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is type I evidence showing minimal cognitive improvement with both cholinesterase inhibitors and memantine in vascular dementia. However, benefits in terms of global outcome are not clear and evidence overall for cholinesterase inhibitors is conflicting. Memantine is recommended for vascular dementia patients whether cholinesterase inhibitors or memantine should be prescribed is unclear with vascular dementia, though those with more vascular dementia and Alzheimer's disease may benefit.</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

**Psychopharmacology for Dementia**

### Table 6. Summary: frontotemporal dementia

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Level of evidence</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholinesterase inhibitors</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Memantine</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>

**Psychopharmacology for Dementia**

### Table 7. Summary: frontotemporal dementia

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Level of evidence</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholinesterase inhibitors</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>Memantine</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
Table 7. Summary box: progressive supranuclear palsy.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Level of evidence</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progressive supranuclear palsy</td>
<td>Type II evidence indicates that no treatments can be recommended at the current time.</td>
<td>B</td>
</tr>
</tbody>
</table>

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Table 8. Summary box: mild cognitive impairment.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Level of evidence</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment with cholinesterase inhibitors and vitamin E</td>
<td>There is type I evidence that cholinesterase inhibitors are not effective in reducing the risk of developing Alzheimer’s disease and type I evidence that vitamin E is not effective in reducing the risk of Alzheimer’s disease. There is type I evidence that cholinesterase inhibitors are not effective in those with mild cognitive impairment.</td>
<td>A</td>
</tr>
</tbody>
</table>

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Table 9. Summary box: primary care.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Level of evidence</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation and prescription of anti-dementia drugs</td>
<td>There is type IV evidence to support the current practice of non-specialist initiation of these drugs, following a specialist diagnosis. There is type II evidence indicating no significant differences between the ranges of prescription and monitoring of the drugs between primary clinics and hospital services.</td>
<td>D</td>
</tr>
</tbody>
</table>
Psychopharmacology for Dementia

Table 10. Summary of end of life care.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Level of evidence</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawal of anti-dementia drugs</td>
<td>Type 1 evidence that continuing drug may decrease the rate of functional decline in individuals with dementia.</td>
<td>C</td>
</tr>
</tbody>
</table>

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Table 11. Summary of other treatments for dementia.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Level of evidence</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMF in prevention and treatment of dementia</td>
<td>Type 1 evidence that MMF is not effective in treating cognitive symptoms.</td>
<td>A</td>
</tr>
<tr>
<td>Fodex and cholinesterase inhibitors for dementia</td>
<td>Type 1 evidence that cholinesterase inhibitors are effective in improving cognitive function.</td>
<td>A</td>
</tr>
</tbody>
</table>

Course of Dementia
Burden of Illness Psychosis, Delirium, Dementia

- Health Life vs Unhealthy Life
- Increased Cost of Healthcare
- Lowered Life Expectancy
- Employment Issues
- Family Relationships
- Social Relationships

Resources

- American Psychiatric Association. The American Psychiatric Association (APA) has developed the Clinician-Rated Dimensions of Psychosis Symptom Severity scale, an eight-item measure that rates the severity of each symptom that defines the schizophrenia spectrum disorders as well as co-occurring manic, depressive, and manic symptoms during the week prior to assessment. [www.psychiatry.org/File%20Library/Practice/DSM/DSM-5/ClinicianRatedDimensionsOfPsychosisSymptomSeverity.pdf](http://www.psychiatry.org/File%20Library/Practice/DSM/DSM-5/ClinicianRatedDimensionsOfPsychosisSymptomSeverity.pdf)

- The APA offers the Clinician-Rated Dimensions of Psychosis Symptom Severity scale without cost for clinical use, but requests that clinicians and researchers provide data on the instrument's usefulness by submitting feedback at the website below. [dsm5.org/Pages/Feedback-Form.aspx](http://dsm5.org/Pages/Feedback-Form.aspx)

- The APA also offers practice guidelines that provide evidence-based recommendations for the assessment and treatment of psychiatric disorders. [psychiatryonline.org/guidelines](http://psychiatryonline.org/guidelines)


- Neuropsychiatric Inventory (NPI). The NPI screens for multiple types of dementia. [npitest.net](http://npitest.net)

- The Mount Sinai Conference on the Pharmacotherapy of Schizophrenia. This report provides guidance on the prescription and monitoring of antipsychotic medications, and is available as a free full text download from Oxford Journals. [schizophreniabulletin.oxfordjournals.org/content/28/1/5.long](http://schizophreniabulletin.oxfordjournals.org/content/28/1/5.long)

References