Lewy Body Dementia: Cognitive, Mood, and Behavioral Symptoms

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Disclosures
None

Objectives
• Describe the cognitive, mood, and behavioral symptoms of Lewy Body Dementia
• Contrast cognitive/mood/behavioral symptoms of Lewy Body Dementia against other neurodegenerative disorders (e.g. Parkinson’s Disease, Alzheimer’s Disease)
• Outline practical recommendations to support patients and their loved ones
Lewy Body Dementia...or Dementia with Lewy Bodies

Lewy Body Dementia

Chicken and Egg, Under Umbrella

Lewy Body Dementia: A Tale of Semantic Confusion
The “one-year rule”


**Essential feature**
- Dementia

**Core clinical features**
- Cognitive fluctuations
- Recurrent visual hallucinations
- REM sleep behavior disorder
- parkinsonism

**Indicative biomarkers**
- Abnormal (low uptake) in basal ganglia on SPECT or PET dopamine transporter scan
- Abnormal (low uptake) 123iodine-MIBG myocardial scintigraphy
- Polysomnographic confirmation of REM sleep behavior disorder

"Dementia"

- 30% point & 70-80% cumulative prevalence
  - Comorbid AD in 30%
- Cognitive fluctuations, visual >> auditory hallucinations, depression, sleep disturbance distinguish this from AD
- Dementia does not mean the person is immune to depression & anxiety

Early Differentiating Cognitive Symptoms

<table>
<thead>
<tr>
<th></th>
<th>LBD</th>
<th>ALZ</th>
<th>PD</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADL decline</td>
<td>Always</td>
<td>Always</td>
<td>Possible years after dx</td>
</tr>
<tr>
<td>Memory Loss</td>
<td>Possible</td>
<td>Always</td>
<td>Possible years after dx</td>
</tr>
<tr>
<td>Language probs</td>
<td>Possible</td>
<td>Possible</td>
<td>Possible</td>
</tr>
<tr>
<td>Visuo-Spatial probs</td>
<td>Likely</td>
<td>Possible</td>
<td>Possible</td>
</tr>
<tr>
<td>Planning/Prob Solving difficulty</td>
<td>Likely</td>
<td>Possible</td>
<td>Possible</td>
</tr>
<tr>
<td>Cog fluctuations</td>
<td>Likely</td>
<td>Possible</td>
<td>Possible</td>
</tr>
</tbody>
</table>


**Core clinical features**
- Cognitive fluctuations
- Recurrent visual hallucinations
- REM sleep behavior disorder
- Parkinsonism

Early Differentiating Non-Cognitive Symptoms

<table>
<thead>
<tr>
<th>LBD</th>
<th>ALZ</th>
<th>PD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in mood</td>
<td>Possible</td>
<td>Possible</td>
</tr>
<tr>
<td>Hallucinations</td>
<td>Possible</td>
<td>Unlikely</td>
</tr>
<tr>
<td>Sev Med Sensitivity</td>
<td>Likely</td>
<td>Unlikely</td>
</tr>
<tr>
<td>Walking changes</td>
<td>Possible</td>
<td>Unlikely</td>
</tr>
<tr>
<td>Balance prob/falls</td>
<td>Possible</td>
<td>Unlikely</td>
</tr>
<tr>
<td>REM sleep beh</td>
<td>Possible</td>
<td>Unlikely</td>
</tr>
</tbody>
</table>

parkinsonism ≠ Parkinson’s disease

- “parkinsonism” is the umbrella term used to describe a group of neurological problems
  - Atypical
  - Doesn’t meet full criteria for PD
- Parkinson’s disease is a diagnosis, when there are 2 out of 3:
  - Tremor
  - Bradykinseia
  - Rigidity

Indicative biomarkers
- Abnormal (low uptake) in basal ganglia on SPECT or PET dopamine transporter scan
- Abnormal (low uptake) $^{123}$Iodine-MIBG myocardial scintigraphy
- Polysomnographic confirmation of REM sleep behavior disorder

DLB: Core Clinical Features
- Fluctuations in cognition and/or arousal
- Recurrent, fully formed visual hallucinations
- Spontaneous parkinsonism
- REM sleep behavior disorder
Psychosis and Hallucinations

Hallucinations:
- **Illusion**: mistaking real object for something else
- **Sensory illusions**: 'passage' hallucination, sensing a presence
- **Visual hallucinations**: evolve from simple, non-threatening, preserved insight to complex, frightening, constant, limited insight

Delusions:
- **Paranoia**: generalized or specific; delusional jealousy
- **Reduplicative paramnesias**: Capgras syndrome and others

Delusions - Paranoia

- Paranoia – generalized or specific to certain situations or individuals
  - E.g., family members stealing money, neighbors or government spying
  - Delusional jealousy/Othello Syndrome: Fixed false belief of significant other cheating despite absence of evidence and/or proof to the contrary

Delusions - Capgras Syndrome

- Persistent or recurrent belief that someone, something, or someplace has been replaced by an imposter, lookalike, or replica
  - Physically the same, psychologically different
- Person with PD/LBD may not be able to clearly state this, but examples:
  - Asking loved one “When is (loved one) coming home?” or “Where is the other (loved one)?”
  - Believes there are multiple Bobs or Marys
  - While at home, asks “When are we going home?”
  - “This isn’t my home/lock/kitchen”
- In lucid moments, may have full insight

Psychosis & Aggression

- Psychosis = illusions, hallucinations, and delusions
  - Minor hallucinations are underrecognized, present in >40% of untreated PD
  - Cumulative prevalence of hallucinations >60% with increasing disease duration
  - Not always frightening but can evolve to be so
  - Independently predicts hospitalization, institutionalization, caregiver strain
    - Vicious cycle of psychosis, agitation, aggression, caregiver strain, acute healthcare utilization → neuroleptic exposures, acquired infections, disorientation and delirium
- Aggression:
  - Physical aggression: 65% in a palliative PD clinic
  - Sexual aggression: 26.9%
Sleep Disorders

Insomnia:
- Depression, anxiety, poor sleep hygiene, restless legs syndrome, dystonia, pain, nocturia, nightmares, sleep apnea
- Treatments: melatonin, mirtazapine, trazodone
- Sleep hygiene education for patient & caregiver

REM Behavior Disorder:
- Melatonin (3-12mg)
- Low-dose clonazepam (0.5-2mg)

Depression

- Significant predictor of quality of life
- 30-40% cumulative prevalence
  - NOT a reaction to the diagnosis
  - Related to serotonergic & noradrenergic changes
- Non-medication treatments:
  - Social involvement, support groups
  - Exercise
  - Cognitive-behavioral therapy
- Medication
  - SSRIs, SNRIs > TCAs

Anxiety

Up to 40% cumulative prevalence

Symptoms
- Loss of confidence, fear of social occasions & public speaking
- Generalized anxiety state
- On/off anxiety states

Treatment options
- Medication-related on & off anxiety: PD medication adjustments
- Psychotherapy
- Generalized anxiety: Anti-depressants
- Anxiolytics: clonazepam, lorazepam, buspirone
Practical Tips: Anxiety, Depression, Irritability

- Identify potential triggers
  - Pain?
  - Frustration, fear, or feeling overwhelmed
- Keep consistent routines
- Simple tasks
- Manage environmental stressors
  - Large crows, over-stimulation

Practical Tips: Hallucinations

- They might not recognize hallucinations are not real
- Tune in to the EMOTION (eg. fear)
  - Rather than reasoning, arguing
- Offer empathy and concern
- Maintain the person's dignity
- Limit further tension
- Talk to their neurologist
  - Medications might help

Practical Tips: Cognitive Impairment

- Set a positive mood for interaction.
- Get the person’s attention.
- State your message clearly.
- Ask simple, answerable questions.
- Listen with your ears, eyes, and heart.
- Break down activities into a series of steps.

https://www.caregiver.org/resource/caregivers-guide-understanding-dementia-behaviors/
Practical Tips: Cognitive Impairment

- When the going gets tough, distract and redirect.
- Respond with affection and reassurance.
- Remember the good old days.
- Maintain your sense of humor.

Practical Tips: Sleep disorder

- Yoga/gym mats around bed
- Bed rails, padding, bed alarms
- Move nightstands away from bed or cushion corners
- Consult with PT and OT to address personalized strategies

Culprits

- Exclude reversible causes
  - UTI, UTI, UTI (urinary tract infection)
  - Pneumonia
  - Other infectious causes (teeth, feet, seat)
  - Bowel obstruction/severe constipation
  - Metabolic derangements, dehydration
  - Medication errors or new medications
- Reduce medications that could be contributing
  - Anticholinergics > amantadine > COMT inhibitors > MAO-B inhibitors > dopamine agonists > levodopa
- Consider low blood pressure
Self Care

• Adjust expectations
• Recognize your limits
• Seek support
• Find respite care options
• Balance – future vs here and now
  – mindfulness

Get Active

• Exercise
• Get & Stay Social
  • Connect with others with LBD
    – Join an LBDA Support Group (live or virtual)
  • Volunteer
    – Join the Lewy Trial Tracker (People with Lewy and Carepartners)
    – Volunteer for LBDA- Consider being a Lewy Buddy to mentor others
• Advocate
  • Raise awareness- write letters, call your representatives and senators at the state and national level to protect healthcare and research funding.

Questions?