Dementia

Dementia is a clinical syndrome of persistent intellectual deterioration that is severe enough to interfere with social or occupational functioning.

Memory deficit may be the main feature, although other cognitive and personality disturbances are present to different degrees.

Understanding Dementia

- Over 5 million Americans have Alzheimer's disease
  - 1 in 9 ages 65 and older
  - 1 in 3 ages 85 and older
  - 2 out of 3 are women
- By 2050, it is projected that 13.8 million Americans will have Alzheimer's (previous estimates were as high as 16 million)
- Alzheimer's is the 5th leading cause of death in the US for persons > 65
- Prevalence worldwide is 35 million
UNDERSTANDING DEMENTIA

- Over 50% of all LTC residents have dementia
- As the population ages, 80% of LTC residents will have dementia
- Dementia is not a diagnosis but a collection of symptoms caused by a multitude of disorders
- Behaviors in demented residents usually result from the fact that we are not meeting their needs
- Behaviors often chart the progression of the disease

Cognition and Aging

- **FORGETFULNESS:** a normal part of aging
- **CONFUSION:** A transient disorientation to time and place
- **DEMENTIA:** “Deprived of Mind”, progressive in stages; eventually life-threatening, not a normal part of aging – a disease
- **DEPRESSION:** Can usually be traced to a starting point; presents as withdrawn, complaining or apathetic
- **DELIRIUM:** Related to an acute medical problem; rapid changes in thinking & alertness

Delirium

- Acute confusional state marked by a decline in attention and cognition
- Frequently has underlying medical etiology
- Prevalence in LTC (including demented patients) of 20-60%
  - 65% unrecognized by physicians
  - 43% unrecognized by nurses
Epidemiology of Delirium

**Delirium Rates**

- Hospital:
  - Prevalence (on admission): 14-24%
  - Incidence (in hospital): 6-56%
  - Postoperative: 15-53%
- Intensive Care Unit: 70-87%
- Nursing Home/post acute care: 20-60%
- Palliative care: up to 80%

**Mortality**

- Hospital mortality: 22-76%
- One-year mortality: 35-40%

Key Features of Delirium

1. Acute onset and fluctuating course
2. Inattention – difficulty answering questions
3. Disorganized thinking – incoherent speech & train of thought
4. Altered level of consciousness
   - Hypoactive Delirium (lethargy and somnolence) is often missed
   - Hyperactive Delirium (agitated, hallucinating, paranoid)
   - 75% are hypoactive or mixed and often have poor prognosis

Comparing Delirium and Dementia

<table>
<thead>
<tr>
<th></th>
<th>DELIRIUM</th>
<th>DEMENTIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onset</td>
<td>Abrupt</td>
<td>Insidious</td>
</tr>
<tr>
<td>Duration</td>
<td>Hours to days</td>
<td>Months to years</td>
</tr>
<tr>
<td>Attention</td>
<td>Impaired</td>
<td>Normal unless severe</td>
</tr>
<tr>
<td>Consciousness</td>
<td>Fluctuating, reduced</td>
<td>Clear</td>
</tr>
<tr>
<td>Speech</td>
<td>Incoherent, disorganized</td>
<td>Ordered, anomic/ aphasic</td>
</tr>
</tbody>
</table>
### Etiology of Delirium

- Dementia
- Electrolytes/Metabolic (K+, FBS, TSH)
- Lungs, liver, heart, kidney, brain
- Infection (Respiratory, UTI)
- Rx use or lack of use
- Injury, pain, stress
- Unfamiliar environment
- Medical Conditions (MI, CVA, DM)

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**Drug**: A *poison*, given in a minute amount, to bring about a therapeutic response.

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“The desire to take medicine is one of the principle features that distinguishes man from other animals”

Sir William Osler - 1891
Medications Associated with Delirium

- Sedative/Hypnotics
  - Benzodiazepines (Valium, Dalmane, Tranxene)
- Pain Medications
  - Demerol
  - Propoxyphene *
- Anticholinergics
  - Antihistamines (Benadryl, Atarax)
  - Antispasmodics (Levsin, Lomotil)
  - Tricyclic Antidepressants (Elavil)
  - Antiparkinsonian Agents (Cogentin, Artane)
- Cardiac Meds
  - Digoxin
  - Antihypertensives (Beta-blockers, Aldomet)
- Antipsychotics *
  - Zantac *

Brain Atrophy

- Alzheimer’s Disease is “Brain Failure”. The person’s brain is dying
- Brain shrinks, cells die
- Abilities are lost
- Areas of loss are predictable, as is the progression

Memory Loss

- Losses
  - Immediate recall
  - Attention to selected info
  - Recent events
  - Relationships
- Preserved
  - Memories of long ago
  - Emotional memories
  - Motor memories
Understanding

- Losses
  - Can’t interpret information
  - Can’t make sense of words
  - Gets off target
- Preserved
  - Can understand facial expressions
  - Hears tone of voice
  - Can get some nonverbal cues

Language/Communication

- Losses
  - Can’t find the right word
  - Word Salad
  - Vague language
  - Single phrases
  - Sound & vocalizing
  - Can’t make needs known
- Preserved
  - Singing
  - Automatic speech
  - Swearing/sex words/forbidden words

Impulse & Emotional Control

- Losses
  - Becomes labile & extreme
  - Think it….say it
  - Want it….do it
  - See it….use it
- Preserved
  - Desire to be respected
  - Desire to be in control
  - Regret after action
Early Dementia

- Memory Loss: Amnesia with difficulty learning new information and rapid rate of forgetting
- Anomia (word finding) and intrusion errors
- Executive Dysfunction: loss of initiative & impaired judgment (social graces usually preserved)
- Visuospatial Skills impaired
- Mood: anxious, agitated, frustrated
- Onset & Progression: gradual

Mid Stage Dementia

- Memory loss: more remote and over learned information
- "A": Aphasia (Language) Apraxia (performing skills) Agnosia (word finding)
- Executive Dysfunction: loss of abstract thought, planning, initiate and sequence
- Behavior: Hallucinations, delusions, agitation, aggression

Mid Stage Dementia

- Sleep Disturbances
- Loss of ability to reason
- Wanderers
  - "I don’t belong here"
  - "I’m being held hostage!"
- Suspiciousness/Paranoia
- Social skills often disguise limitations
  - “All dressed up with no where to go”
Late Stage Dementia
- Changes in gait
- Changes in appearance/Self care
- Very frustrated
- Increased agitation, anxiety and aggression
- Vision changes
- Change in ability to control body temperature
- Impaired ability to carry out tasks

End Stage Dementia
- Primarily instinctive behavior
- Overt agitation; this is the only way of communicating needs
- Failure to thrive
- Cannot understand language

Behavioral Symptoms

<table>
<thead>
<tr>
<th>Medication Non-responsive</th>
<th>Medication Responsive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wandering</td>
<td>Agitation</td>
</tr>
<tr>
<td>Hoarding/Rummaging</td>
<td>Hallucinations</td>
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<tr>
<td>Social Withdrawal</td>
<td>Delusions</td>
</tr>
<tr>
<td>Social Inappropriateness</td>
<td>Depression</td>
</tr>
<tr>
<td></td>
<td>Aggression</td>
</tr>
</tbody>
</table>
What is Agitation?

**OBRA Definition**

"Motor or vocal behavior that is:
- disruptive,
- unsafe,
- interferes with care
  in a given environment"

Agitation.....

- Any inappropriate verbal, vocal, or motor activity that is not an obvious expression of need or confusion
- Consists of a group of symptoms that can be due to a variety of causes
- Rarely occurs as an isolated event
- Level of agitation fluctuates
- Linked to the stage of dementia

Causes of Agitation

- Acute psychosis: 80% of NH population carry a psychiatric diagnosis
- Cognitive impairment
  - Learned behavior is gone (i.e. consequences of actions)
  - Not able to communicate needs (leads to catastrophic outbursts)
- Substance abuse/Meds used inappropriately
- Delirium
Agitation Triggers: Caregivers

- Limited knowledge of the disease process
- Task-driven inflexibility
  - Why can’t he do that anymore?
  - She could do that yesterday.....
- Burnout
- Burnout
- Burnout

People with dementia are doing the BEST that they can!

Remember who has the healthy brain!

Being “right” doesn’t always translate into a good outcome for the patient OR for the caregiver.

Response to Behavioral Problems

- Prevention
- Assessment of Behavior
- Determine Possible Cause
- Work as a Team
- Remember…..change takes time
- Patience, patience, patience......
Agitation Triggers: Physical
- Pain
- Hunger/thirst
- Constipation/impaction
- Distended bladder
- Drug effects
- Caffeine/alcohol
- Disruption of sleep cycle
- Incontinence
- Fatigue
- Infection
- Dehydration
- Immobility
- Sensory loss (Can’t see, Can’t hear, Don’t understand…)
- Sensory overload

Agitation Triggers: Emotional
- Loss of learned significance
- Lost language
- Disinhibition
- Depression
- Misinterpretations
- Hallucinations
- Delusions

Agitation: Treatment Objectives
1. Rapid resolution to distress and de-escalation of event
2. Minimize functional loss due to
   - Movement disorder
   - Sedation
   - Delirium
   - Cognitive impairment
3. Prevent injury to patient and staff
4. Developing a therapeutic alliance
Assessing Behavioral Disturbance

**BEHAVIORAL DISTURBANCE**

- "Disturbing"
- "Disturbed"
  - Aggressive
- Assaultive
  - Episodic
  - Persistent
  - Provoked
  - Unprovoked
  - Specific
  - Random

**MEDICAL CAUSE**

**SUGGESTED INTERVENTION**

- Pharmacological
- Behavioral

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When are Medications Appropriate?

- Diagnosis (new CMS directives)
- Target symptoms
- Short term
- Routinely evaluated

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Behaviors that do not Usually Respond to Medications

- Wandering
- Inappropriately verbalizing
- Willfulness
- Hyper-sexuality
- Inappropriate Voiding
- Disrobing
A Word about Antipsychotics......

- No proven efficacy in this population
- Often increase confusion
- Newer agents not proven to be better
- Black-box Warning re: mortality risk
- Huge expense
- Many, many side effects

Antipsychotic Side Effects

- Anti-cholinergic
- Postural Hypotension
- Extra-pyramidal Symptoms
  - Pseudo-Parkinsonism
  - Akathisia
    - Pacing, inability to sit still
    - Often Perceived as agitation
    - Appears 1-2 wks after starting therapy
    - Most common EPS side effect
    - Also a side effect of metoclopramide (Reglan®)
  - Tardive Dyskinesia
    - More common in elderly
    - Potentially irreversible
    - AIMS or DISCUS needed for screening

Antipsychotic Side Effects continued

- Neuroleptic Malignant Syndrome
  - Medical Emergency
  - Decreased body temperature
  - Rigidity
  - Altered consciousness
- Lowering of Seizure threshold
- Postural Hypotension
- Weight gain
- Lethargy/Sedation
So......what are our other options?

Non-pharmacological interventions are the long term *key* to behavioral management

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Approach to Treatment

- Understanding that we are trying to hit a moving target as the disease progresses and behaviors change
- Understanding that there is no magic bullet

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Agitation: Non-Pharmacological Management

- Working with the Patient
  - Proper approach
  - Structured program targeted for the stage of dementia that the patient is in
  - Simplifying routines
  - Structure activities to involve ADL’s (Dementia patients don’t need to be entertained!)
  - Make the most of what is left
  - Rescue them from being confronted with their deficits
  - Go down their path rather than dragging them down ours
Agitation: Non-Pharmacological Management

**Working with the family**
- Learn the patient’s history/habits
- Learn to optimize what is the best time of day for the patient
- Offer reassurance
- Learn what is “normal” for this patient

**Environmental Changes**
- **Noise Level**
  - Limit intercom use whenever possible
  - Reduce staff noise, especially at change of shift
- **Lighting**
  - Softer lighting when possible
  - Lower lights at bedtime & scheduled rest times
- Reduce visual clutter
- Furnishings/Equipment with home-like appearance

**Working with Staff**
- Protect from injury
- Emphasize interdisciplinary approach
- Educate
- Modifying Interventions
  - Rescue
  - Assume Blame
  - Distract
  - Change Focus
## Wandering: Possible Causes

- Physical discomfort
- Sensory overload
- Sensory deprivation
- Friend or family out of sight
- Acting out a once regular routine (i.e. leaving for work)
- Inability to recognize surroundings
- Searching for home
- Inactivity
- Disorientation to time
- Feeling of uselessness
- Bored with activity
- Lack of activity
- Need to use bathroom
- Desire to leave triggered by watching others leave

## Wandering: Interventions

- Provide opportunity for exercise
- Develop social/medical history to understand past habits
- Develop areas indoors and outdoors that residents can explore independently
- Reduce noise and confusion in the environment (change of shift, intercom, etc)
- Mark bathrooms and other public areas clearly
- Camouflage doors with similar paint color or mirrors
- Monitor for medication changes
- For patients that develop patterns of wandering, try to anticipate the event and distract

## Yelling/Screaming: Possible Causes

- Hunger
- Need to go to the bathroom
- Incontinence
- Fatigue
- Pain
- Need for repositioning
- Acute medical issue
- Environmental overload
- Use of physical restraints
- Upset by other resident’s behaviors
- Frustration
- Fear/anxiety
- Boredom
- Procedures that cause discomfort or are not understood
### Yelling/Screaming: Interventions

- Medical evaluation to rule out illness, pain, infection or impaction
- Provide snacks/hydration
- Routine toileting
- Scheduled rest breaks
- Frequent repositioning
- Maximize sensory input (eyeglasses, hearing aids)
- Create relaxing environment
- Use calm soothing voice
- Always explain what is being done
- Break tasks into short steps
- Use consistent routines
- Identify staff members who work well with certain individuals

### Issues with Sleeping: Possible Causes

- Pain
- Medical conditions
- UTI/bladder pressure
- RLS/leg cramps
- Depression
- Medication side effect
- Sleep apnea
- Disruption in sleep pattern
- Hunger
- Disturbing dreams
- Improper lighting
- Temperature of room
- Change in environment
- Lack of exercise
- Fatigue/can’t relax
- Caffeine
- Agitation before bedtime
- Life patterns
- Daytime napping

### Issues with Sleeping: Interventions

- Identify & treat underlying medical issues
- Treat pain
- Evaluate medications for side effects
- Provide adequate but soft lighting
- Toilet before bedtime
- Avoid environmental changes
- Maintain a set routine with habits from the past
- Avoid daytime napping
- Reduce caffeine intake (coffee, tea, soft drinks, chocolate)
- Avoid upsetting activity late in day (bathing)
- Promote activity/exercise
Goals in Managing Behavior

- Improve quality of life and quality of care
- Manage behavior without reliance on chemical and physical restraints
- Decrease caregiver burden
- Increase joy of care giving

Barriers to Success

- Not accepting the “So Whats”
  i.e. Pajamas at bedtime
- Following “The Rules”
  i.e. Water pitchers at bedside
- Resistance to Change
- Believing in only ONE right answer

Basic Solutions

- Modify physical approach (slowly... from the front... at their level)
- Empathetic communication (tone... how you say... what you say)
- Strong visual cues
- Short and simple verbal cues
- Familiar tactile cues
- Change the environment
- Individualize approach based on each individual’s own unique abilities and needs
We Accomplish our Goals....

- By not expecting things to be “like they used to be”
- By letting go of the need to be “right”
- By learning to “go with the flow”
- By remembering who has the “big brain”

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We Accomplish our Goals....

- By being non-confrontational
- By focusing not on problems, but on needs
- By modifying the environment
- By modifying OUR behavior/approach

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Thanks for all you do!