

Challenging the Impossible: Personal Safety for Persons with Dementia

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Learning Objectives

1. Discuss the challenges of maintaining person-safety for patients with dementia
2. Delineate techniques for minimizing the safety concerns for such persons

The risk for injury

- Terms for consensus
 - cognitive impairment
 - dementia
 - delirium
 - behavior

Cognitive impairment

- Cognition
 - a faculty for the human-like processing of information, applying knowledge and changing preferences
 - thinking, learning, abstraction, memory, language, judgment, reasoning
- Cognitive impairment
 - deficit(s) in any domain of cognition

Abnormal cognitive change

- Not normal aging
- Disease-related
 - most commonly: progressive neurodegenerative disease, esp. Alzheimer's disease
 - 10-12% age 65-75
 - 20-25% age 75-85
 - 30-35% age 85-90
 - 50% age 90 and older

Mild Cognitive Impairment

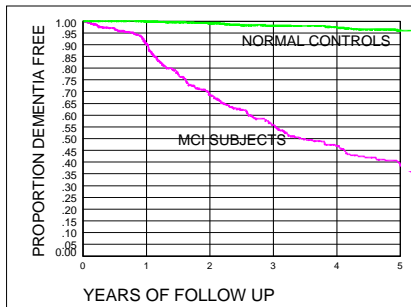
- Persons with significantly impaired cognition who do not meet the definition of dementia
- 12% of persons over age 70

Criteria for MCI

- Memory complaint / corroborated by informant
- Not demented
 - normal general cognitive function
 - normal activities of daily living
- CDR rating = 0.5
- Memory impaired for age (tends to be $\downarrow \geq 1.5$ SD on standard neuropsychological testing)

Petersen et al., 1999

MCI to Clinical AD: A Much Higher Rate Than Normal Elderly



Dementia

- Cognitive impairment with resultant functional impairment

What it isn't...

- simple forgetfulness
 - everyone >50 has it
 - word-finding, remembering names
- Mild Cognitive Impairment (MCI)
 - patient complains (or family reports) excessive memory decline
 - abnormal memory for age
 - no dementia (but many do develop dementia)

Dementia

Clinical syndrome caused by a wide range of diseases resulting in a global decline in cognitive functioning affecting:

- Memory
 - Language
 - Judgment
 - Reasoning
- deficits in any of these areas may be described as "cognitive impairment"
- "cognitive impairment" is sometimes used to mean dementia, but not everyone who has cognitive impairment has dementia

Occurs in clear consciousness. Has progressed to where there is impairment in life functioning.

What it is...

- impairment or loss of ability in cognitive functions
 - memory
 - judgment
 - reasoning
 - language
 - planning and carrying out plans

global

What it is...

- impairment or loss of ability in cognitive

memory...

remembering recent stuff – learning new things, such as remembering appointments
older memories – faces, names, places, directions
remote memories – childhood and young adult facts, relationships

What it is...

- impairment or loss of ability in cognitive functions

loss of judgment...

not realizing, acknowledging or acting on admitted negative consequences of an action

example: wandering in traffic

- language
- planning and carrying out plans

What it is...

- impairment or loss of ability in cognitive functions

- memory

inability to reason...

not being able to problem-solve or think abstractly

language

- planning and carrying out plans

What it is...

- impairment or loss of ability in cognitive functions

- memory

- judgment

language difficulties...

word finding, using another word to mean the same thing, trouble putting words together, mis-interpreting words

What it is...

- impairment or loss of ability in cognitive functions

- memory

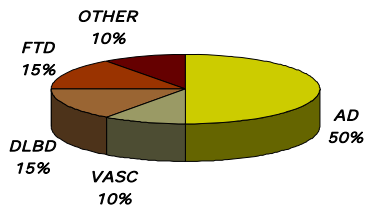
- judgment

- reasoning

executive dysfunction...

not being able to create a workable plan to do something, or, having a plan, not being able to carry it out

Causes of Dementia



Potentially Reversible Causes Of Dementia

- Thyroid disease
- Normal pressure hydrocephalus
- Vitamin B12 deficiency
- Depression
- Tumors
- Infections, vasculitis

Cortical Dementia

- Affects cerebral cortex
 - Amnesia
 - Agnosia
 - Aphasia
 - Apraxia
- Example - Alzheimer's Disease

Subcortical Dementia

- Damage to deeper brain structures
 - Dysmnnesia
 - Dysexecutive
 - Delay
 - Depletion
- Example - dementia of Parkinson's disease

Cortical vs. Subcortical Dementia

Cortical

- loss of core ability "to do" cognition
- trouble with retention
- affects cerebral cortex
- personality relatively spared

Subcortical

- loss of ability to "coordinate" cognition
- trouble with retrieval and manipulation
- involves deeper brain structures
- personality changes, depression - apathy

Cortical Dementia

- Alzheimer's disease
- Frontotemporal dementia
- Lewy Body dementia
- Creutzfeldt Jacob disease

Subcortical Dementia

- Dementia of Parkinson disease
- Vascular dementia
- Huntington disease
- MS related dementia

Mixed dementia

- Alzheimer's disease often coexists with other forms of dementia
 - Example - mixed vascular dementia and Alzheimer's Disease

Alzheimer's Disease Uncomplicated vs. Complicated

- | | |
|-----------|---------------------|
| □ Amnesia | □ Depression |
| □ Aphasia | □ Delusions |
| □ Apraxia | □ Hallucinations |
| □ Agnosia | □ Insomnia |
| | □ Mania |
| | □ Behavior problems |

Alzheimer's Disease - Uncomplicated vs. Complicated

Approximately 80-90% of those diagnosed with dementia will have some complicating, behavioral symptom at some time during the course of their illness.

Depression in Dementia

- ❑ Is depression a prodrome?
- ❑ Affects 20-40% of AD patients
- ❑ Non-sad, irritability is prominent
- ❑ Disturbance in sleep, appetite, pleasure (anhedonia)
- ❑ Somatic focus
- ❑ Treatable
- ❑ Recognition is essential
- ❑ Higher risk if there is a premorbid history of depression

Treatment of Depression

- ❑ Treatment takes time
- ❑ Education of families and caregivers
- ❑ Address nutritional needs
- ❑ Activity
- ❑ Medications
- ❑ ECT

Hallucinations

- ❑ Sensory experience without a stimulus
- ❑ Common in eye disease, delirium
- ❑ Hypnagogic (before sleep)
- ❑ Hypnopompic (before waking)
- ❑ Seen in grief
- ❑ Visual most common, can be frightening
- ❑ Auditory, voices
- ❑ Not always a need to treat

Illusions

- ❑ Mis-interpretations of a stimulus
- ❑ Visual, auditory
- ❑ A vase is a cat
- ❑ A door slamming is a gunshot

Delusions

- ❑ Fixed false beliefs held despite evidence to contrary
- ❑ Cannot be redirected
- ❑ Not commonly held by persons of the culture
- ❑ Suspicious, morbid jealousy
- ❑ Poisoning
- ❑ Being watched, plotted against
- ❑ Sensory perception is important

Delusions, consequences

- ❑ Uncooperativeness
- ❑ Aggression
- ❑ Refusing food, medications
- ❑ Elopement

Hallucinations and Delusions: Behavioral Response

- Empathy
- Reassurance
- Avoid arguing and reasoning
- Redirection
- Adapt the environment

Mania in Dementia

- Rare
- Symptoms
 - sleep loss
 - intrusiveness
 - hypersexuality
 - irritability
 - grandiosity

Delirium

- It's not dementia!

Delirium, DSM IV

- Disturbance in level of consciousness and sensorium
- Abrupt change in cognition
- Acute onset, fluctuating course (waxing and waning attention) lethargic to hypervigilant
- Sleep and wake disturbances are common
- Evidence of relationship to a general medical condition by history, exams, labs

Delirium Common Causes

- Infection - pneumonia, UTI
- Dehydration
- Medications –
 - Antipsychotics
 - Anti Anxiety Agents
 - Narcotics
 - Dilantin, Depakote
 - Ultram
 - Anticholinergic Medications (Detrol, Tricyclics)
 - Anesthesia
 - Metabolic abnormalities (hyponatremia)

Significance of Delirium

- Demented patients are at high risk
- Delirium often not recognized
- Change in mental status is often the first sign of a life- threatening illness
- Risk of mortality is high
- Unsafe behaviors are common

Delirium, Treatment

- ❑ Rule out infection (check urine, CBC, listen to lungs)
- ❑ Taper or D/C medications with CNS side effects
- ❑ Assess and maintain hydration (skin turgor, oral mucosa, lab studies)
- ❑ Avoid restraints
- ❑ Gain attention before teaching
- ❑ Keep verbal communication simple

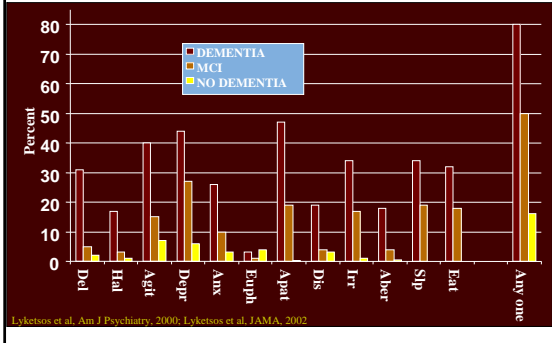
Delirium vs. Dementia

	Delirium	Dementia
Onset	Abrupt	Insidious
Duration	Hours/Days	Months/Years
Attention	Impaired	Normal
Consciousness	Fluctuating	Clear
Speech	Incoherent	Ordered

Behavior

- ❑ Behavioral symptoms in persons with cognitive impairment

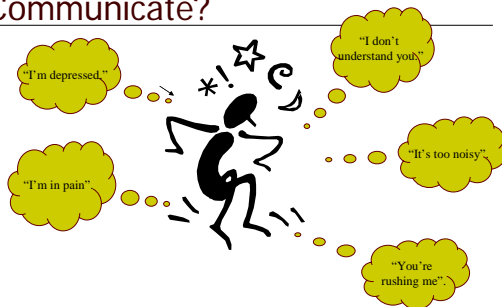
NP symptoms: cumulative prevalence, since onset of cognitive symptoms



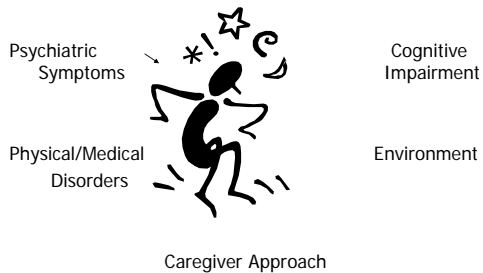
Behavioral Symptoms, Toward a conceptual framework

- We give behavior meaning
- Definition and tolerance vary greatly
- Behavior is the result of interaction
- Behavior is rarely random or unprovoked

What is the Patient Trying To Communicate?



Origins and Risk Factors of Behavioral Symptoms



Cognitive impairment

- Resident comes to the office and calls daily to clarify appointments and prescribed medications.
- "She can't find the words sometimes."
- "He can't put his shirt on anymore, he can't use the buttons."
- "He urinated in the flower pot."

Psychiatric conditions

- "She has been tearful almost every evening and doesn't want to get out of bed in the morning."
- "She said that my sister and I were sitting in the tree throwing rocks at her."
- "She thinks someone took her children."
- "He doesn't sleep and is so irritable."

Physical, Medical

- "He's so sleepy, it's hard to get him to eat. The food runs out of his mouth."
- "He cries when we get him up to transfer to the bathroom."
- "She's up at night asking to go to the bathroom every 30 minutes."

Environmental Factors

- "He goes off when Mr. Smith starts yelling."
- "She hits him when he pushes her in the wheelchair."
- "She kept leaving the party and was sitting by herself in the bedroom."

Caregiver Approach

- "You are going to fall if you don't use that walker. Now get back in bed before you break a hip."
- "It took 5 people to give him a bath."

Managing the risk

General Approaches

- Adjust expectations to abilities
- Identify and treat psychiatric conditions
- Give vigilant medical care
- Adjust environmental press
- Fine-tune caregiver approach

The 5D Strategy

- Describe it
- Decode it
- Design a plan
- Do it
- Determine if it works

Describe and document

- Just the facts
- What do you see and hear?
- How often?
- In what circumstances?
- With whom?
- Who is successful?

Decode it

- How cognitively impaired is the patient?
- Are psychiatric problems present?
- Review of systems, body audit
- Observe environmental press
- Observe caregiver approach

Design a plan

- Who will do what?
- How often?
- Off shifts? Agency?
- Communication
- Responsibility

Do it

- Role modeling
- Consistency across shifts, persons
- Communicate success, failure

Determine if it works

- Determine a threshold
- Gather info from all involved
- Video taping
- Trial and error
- Don't give up
- Some patients need hospitalization

Education

- Staff education and training in the management of behavioral symptoms in demented persons are the cornerstone of any initiative to improve performance and reduce patient risk.
- ALL staff...

Topics

- ❑ The dementias: pathology and effects
- ❑ Mood disorders
- ❑ Caregiver approach
- ❑ Patient and caregiver safety

Process

- ❑ Development of provider and manager expertise
- ❑ Line staff education, training and supervision
- ❑ Monitoring of process

Summary

- ❑ The risk for injury in cognitively-impaired patients is over and above that of patients with normal cognition
- ❑ Knowledgeable and competent providers and caregivers are essential parts of a program to meet patient-safety standards and reduce patient injury