Dementia: after the diagnosis

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Number of persons over 65 in US

![Graph showing the number of persons over 65 in the US from 1900 to 2020. The x-axis represents the years 1900 to 2020, and the y-axis represents the million of persons. The graph shows a significant increase in the number of persons over 65 during 1900 to 2020.]
At no other point in human history has such a large proportion of the population achieved a full life span.
Prevalence of at least 1 ADL or IADL difficulty among older individuals in the community
"The great secret that all old people share is that you really haven’t changed in 70 or 80 years. Your body changes, but you don’t. And that, of course, causes great confusion”

Doris Lessing
PREVALENCE OF ALZHEIMER’S DISEASE WITH INCREASING AGE


Percent of Patients With AD

Age (Years)

0 5 10 15 20 25 30 35 40 45

65-69 70-74 75-79 80-84 85-89 90-94 95-99
Dementia

- An acquired syndrome of decline in memory and at least one other cognitive function (e.g. apraxia, aphasia, agnosia) sufficient to affect daily life in an alert person.

- Small et al. JAMA 1997;278:1363-1371
Etiologies of Dementia

- AD: 57%
- AD + LB: 4%
- LB: 4%
- VaD: 10%
- FTD: 5%
- Other: 5%
Pitfalls in the appropriate evaluation of dementia

- Recognition of early dementia
  - without screening a demented individual with intact social skills may not be detected

- Documentation
  - mental status frequently not documented
  - automatic responses: A&OX3 or WNL are not helpful
More pitfalls

- **Attitudes**
  - Ageism and the automatic assumption that all confusion in an elderly person is dementia
  - Failure to look for an underlying cause for worsening dementia in an individual already labeled as “demented”
  - Sense of futility in evaluating persons with dementia due to a perception that there is “nothing to do for it anyway”
Disease course of Alzheimer’s

- Disease has probably been present for 8 to 10 years at the time of initial diagnosis.
- Average life expectancy is 8 to 12 years after diagnosis.
- Typical course is a progressive decline in cognitive ability and functional status requiring increasing level of physical and social support with a frequent need for custodial care.
Dementia is......

- Loss of memory and other cognitive functions
- A decline in the ability to perform usual daily tasks
- Changes in behavior and personality
- Loss of ability for self care and self determination
Dementia symptoms

- Memory loss
- Confusion
- Anxiety
- Paranoia
- Depression
- Apathy
- Anger
- Agitation
- Fear
- Sleep cycle disruption
- Wandering
- Language disturbance
Ten warning signs of dementia

- Memory problems that affect job
- Difficulty with familiar tasks
- Language problems
- Disorientation to time and place
- Judgment problems
- Problems with abstract thinking
- Misplacing things
- Changes in mood or behavior
- Changes in personality
- Loss of initiative
The Medical History

- Existing and past medical illness may manifest as an apparent cognitive decline.
- The presence of cognitive impairment may mask the symptoms of other underlying medical conditions.
Pharmaceutical history

- Inquire about ALL medications: prescription, over the counter and under the counter
- Ask about shared medications: “I get by with a little help from my friends”
- The BEST assessment tool for polypharmacy is the brown bag technique
Substance abuse

- Alcohol abuse is a risk factor for dementia and delirium
- Alcohol abuse is common among older persons
- Alcohol may increase the symptoms of dementia and may accelerate the rate of cognitive decline
Issues to cover at diagnosis

- Effect of disease
- Disease progression
- Ability to perform daily tasks
- Available medications
- Difficult behaviors
- Where to find help and services
- Caregiver information
- Financial and legal planning issues
- Driving
Important considerations that are often not addressed

- Autonomy
- Decision making
  - Capacity and competence
- Financial planning
- Living situation
- Change in life role
- Driving
- Safety
  - Wandering,
  - Household emergencies
- Management of coexisting illness
- Medical decision making
- End of life planning
Goals of management

- Slow disease progression
- Stabilize functional status
- Symptom management
- Provide safety and security
- Adequate support to family and caregivers
- Preservation of dignity
Management strategies

- Appropriate diagnosis and treatment of co-morbid illness (hypertension, CAD, DM)
- Medications
- Symptom management (psychosis, depression, agitation)
- Multi-discipline care network (care management, home care, day care, assisted living)
REMEMBER

- Co-morbid illness is common in individuals with dementia and often it has not been recognized.
- The diagnosis of dementia must include a FULL medical work up for coexisting illness.
Driving and dementia

Autonomy versus public safety
Dementia and insight

- Patients with mild to moderate dementia often lack insight into their impairments.
- In our culture driving is equivalent to autonomy and personal freedom.
- Patients and sometimes their family members may be in denial about the effect the illness may have on driving.
Car plows through market, killing 9

Thursday, July 17, 2003 Posted: 11:46 AM EDT (1546 GMT)

SANTA MONICA, California (CNN) -- An 86-year-old man who drove his mid-size Buick through a crowded farmers' market Wednesday told police he couldn't stop and may have hit the accelerator instead of the brake, Santa Monica Police Chief James T. Butts Jr. said.

Nine people were killed, including a 3-year-old girl, authorities said. The more than 54 hurt include 14 people with critical injuries, they said. Two of those critically injured are under the age of 2.

The bodies of two victims lay covered on the street after a car plowed through a crowded farmers market.
What happens after a physician completes a DMV report

- The license may be suspended pending evaluation
- A driver evaluation usually including road test will be performed
- If the license is reinstated periodic retesting may be required
- A “limited” license may be issued
Reactions to restriction of driving

- Anger, denial and outrage
- Switching doctors (or states)
- Lawsuits
- Social isolation and depression
- Ignoring the license revocation
Complications of dementia

- Behavioral disturbance
- Gait disorder and falls
- Weight loss and cachexia
- Co-morbid chronic illness
- New onset acute medical illness
Falls and Late Stage Dementia

- Individuals with dementia have an increased risk for falls and fractures
  - Fracture rate 3 X greater in AD than age and sex adjusted general population
    - Buchner and Larson, JAMA 257:11, 1987

- Many variables are involved in the risk for falling in dementia patients
  - Co-existing illness, adverse drug reactions, gender, dementia stage & type, gait apraxia, environment
Co-existing conditions contributing to gait disorder in dementia

- Adverse drug reaction
- Orthopedic abnormalities
- Muscle wasting and weakness
- Cerebellar, basal ganglion or vestibular deficits
- Peripheral neuropathy
- Peripheral vascular disease
Common chronic conditions that increase fall risk

- Hypertension
- Atrial Fibrillation
- Congestive heart failure
- Diabetes
- Urinary incontinence
Drugs that contribute to fall risk

- Diuretics
- Antihypertensives
- Antiarrhythmics
- Antipsychotics
- Antidepressants
- Benzodiazepams
- Hypoglycemic agents
- Drug-drug interactions
- Cholinesterase inhibitors? (bradycardia)
- Anticonvulsants
- Anticholinergics
- Hypnotics
- Antihistamines
- Opiates
- Others (idiosyncratic)
Weight loss and dementia

Progressive weight loss is one of the hallmarks of dementia
Dementia and weight loss

- Accelerated weight loss is common in advanced dementia
- There is a loss of skeletal muscle mass and decreased fat free mass
- Association between low body weight and atrophy of mesial cortex
- There is no compelling evidence for a hyper-metabolic syndrome in dementia
- Decreased active energy expenditure is associated with decreased energy intake
  - Review by Poehlman and Dvorak Am J Clin Nutr 2000:71 (suppl)
Strategies to ameliorate weight loss in dementia

- Eliminate unnecessary or appetite suppressing medications (polypharmacy)
- Energy dense foods
- Assisted feeding
- Increase physical activity
  - Increase of energy expenditure leads to increase of energy intake
  - May help decrease sarcopenia
Drugs that can contribute to weight loss

- Statins
- Cholinesterase inhibitors
- Antibiotics
- Opiates
- NSAIDs
- Digoxin
- Sedatives and hypnotics
- Antidepressants
  - SSRIs
  - Amitriptyline
- Anticholinergics
- Antipsychotics
So what about tube feedings in dementia patients

- Review of the evidence showed no evidence of benefit for patients with dementia
  - No benefit for: survival, pneumonia, pressure sores, or function
    - Finucane et al. JAMA 1999:282(14)
- Worse outcomes for dementia patients
  - Mortality 54%/1 month 90%/1 yr dementia
  - VS 28%/1 month 63% /1yr non dementia
    - Sanders et al. Amer Journal Gastroenterology 2000: 95(6)
Agitation and aggressiveness in late stage dementia

- Are common and have a significant adverse impact on care
- Most frequent reason for failure of care at home or for transfer from care facility to inpatient geriatric psychiatry unit
- Have numerous biologic and environmental triggers.
Medical conditions that cause or contribute to agitation in dementia

- Adverse drug reaction
- Sensory impairment
- Metabolic disorders
- Infections
- Dyspnea
- Anemia

- Fecal impaction
- Urinary retention
- Pain
  - Muscle-skeletal
  - Inflammatory
  - Visceral
  - Neuropathic
Pain is *Special*

- Can present as agitation, aggressiveness, depression, apathy or functional decline
- Difficult to recognize in a patient with impaired ability to communicate
- Advanced dementia may alter perception of pain
- Presence of agitation or aggression may result in an incomplete exam and failure to identify the source of pain
Dementia features that may contribute to agitation

- **Agnosia:**
  - Misperceptions and misinterpretation of the environment can cause fear response

- **Aphasia:**
  - Inability to communicate or understand leads to frustration response

- **Apraxia:**
  - Difficulty with common automatic daily tasks also causes frustration and anger
Environmental triggers to agitation and aggression

- Noisy, chaotic or confusing environment
- New environment or situation
- Confinement or restraint
- Staff or caregiver response
  - Attempts to restrain or confine patient
  - Confrontational approach
  - Loud, threatening or angry voice
  - Facial expressions
Non-drug interventions for agitation

- Redirection away from focus of agitation
  - Engagement in conversation or activity
  - Walk with me, talk with me
  - Avoid confrontation
  - Be flexible, creative and innovative

- Behavior mapping
  - To identify triggers and patterns of agitation

- Quiet rooms
  - Music, mood lighting, comfy chair
A pragmatic approach to behavioral symptoms in late stage dementia

- Evaluate thoroughly for underlying cause or trigger for behavior
- Focus on those symptoms that place the patient or others at risk
- Do not attempt to “normalize” behavior
- Do not treat trivial annoyance behaviors
- Try non-drug interventions first, and educate staff or caregivers
Physician review: avoid polypharmacy

- Discontinue meds when there is no ongoing need
- Eliminate meds with no therapeutic benefit
- Substitute a safer med if available
- AVOID TREATING AN ADVERSE DRUG REACTION WITH ANOTHER DRUG
The Beers List: a good place to start

<table>
<thead>
<tr>
<th>Drugs and Classes Potentially Inappropriate for Use in the Elderly</th>
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<tbody>
<tr>
<td>Amiodarone</td>
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<tr>
<td>Amitriptyline (H)</td>
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<tr>
<td>Amphetamines (excluding methylphenidate hydrochloride and anorexics)</td>
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<tr>
<td>Barbiturates (H)</td>
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<tr>
<td>Benzodiazepines, long-acting (chlordiazepoxide [H], diazepam [H], flurazepam [H], oxazepam [H], temazepam)</td>
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<tr>
<td>Chlorpheniramine</td>
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<td>Chlorpropamide (H)</td>
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<td>Cimetidine</td>
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<tr>
<td>Clonidine</td>
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<tr>
<td>Clorazepate</td>
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<tr>
<td>Cyproheptadine</td>
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<tr>
<td>Desiccated thyroid</td>
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<tr>
<td>Digoxin &gt;0.125 mg/day (H)</td>
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<tr>
<td>Diphenhydramine (H)</td>
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<tr>
<td>Dipyridamole, short-acting (L)</td>
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<tr>
<td>Disopyramide (H)</td>
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<tr>
<td>Doxazosin</td>
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<td>Doxepin (H)</td>
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<tr>
<td>Ergot mesyloids (L)</td>
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<tr>
<td>Estrogens</td>
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<tr>
<td>Ethacrynic acid</td>
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<tr>
<td>Ferrous sulfate &gt;325 mg/day</td>
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<tr>
<td>Fluoxetine</td>
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<tr>
<td>Gastrointestinal antispasmodics (belladonna alkaloids, clidinium-chlordiazepoxide, dicyclomine, hyoscyamine, propanthelone—all [H])</td>
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<tr>
<td>Guanadrel</td>
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<td>Guanethidine</td>
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<td>Hydroxyzine</td>
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<td>Indomethacin (L)</td>
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<td>Isoxsuprine</td>
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<td>Ketorolac</td>
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<tr>
<td>Meperidine (H)</td>
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<td>Meprobamate</td>
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<td>Mesoridazine</td>
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<tr>
<td>Methyldopa and methyldopa/hydrochlorothiazide (H)</td>
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<tr>
<td>Methytestosterone</td>
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<td>Mineral oil</td>
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<tr>
<td>Muscle relaxants (carisoprodol, chlorzoxazine, cyclobenzaprine,</td>
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<tr>
<td>dantrolene, methocarbamol, orphenadrine—all [L])</td>
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<tr>
<td>Nifedipine, short-acting</td>
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<tr>
<td>Nitrofurantoin</td>
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<tr>
<td>NSAIDs, long-term use of full-dose, longer half-life, non-COX-selective types (naproxen, oxaprozin, and piroxicam)</td>
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<tr>
<td>Oxybutynin, short-acting</td>
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<tr>
<td>Pentazocine (H)</td>
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<td>Perphenazine-amitriptyline</td>
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<td>Promethazine</td>
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<td>Propoxyphene</td>
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<tr>
<td>Reserpine (L)</td>
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<tr>
<td>Stimulant laxatives, long-term use except with opiate analgesics (bisacodyl, cascara sagrada, and Neoloid)</td>
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<tr>
<td>Thioridazine</td>
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<td>Ticlopidine (H)</td>
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<tr>
<td>Trimethobenzamide (H)</td>
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<td>Tripelemamine</td>
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H = high-severity-impact medication; L = low-severity-impact medication.

General recommendations

- Simplify drug regimen
- Evaluate need for each drug taken
- With new drug start low, go slow
- Use a few drugs well, rather than many drugs poorly
- Titrate based on response
- Pay close attention to adverse reactions
Communicating with your doctor about age related concerns

- How do you make yourself heard?
- How do you become an effective partner with your doctor?
- What do you need to bring to the encounter to make the appointment more productive.
The reality of the health care system

- Most physicians practice in an incentive and productivity based reimbursement environment
  - The more patients seen, the shorter the visit time, the greater the reward.
What you need to bring to the physician encounter

- An agenda: a concise list of problems and concerns that identifies the highest priority issues
- Back up: a friend, family member, caregiver
- A complete list of medications:
  - Prescription, over the counter, supplements, herbals and “nutraceuticals”
  - Best to bring everything you are taking to an appointment (the brown bag technique)
Strategies to enhance physician encounter

- Record concerns as they arise between visits
- Prepare list of concerns and questions and bring to appointment
- Have family member or trusted friend accompany you

- Ask questions
  - Clarify instructions
  - Make sure you understand explanations

- Ask for written instructions
- Establish follow up
  - Next appointment
  - Symptoms to prompt earlier return appointment
What do you want in a physician?

- **Knowledgeable**
  - About aging
  - About your condition

- **Competent**
  - Board certification
  - Licensing

- **Professional**

- **Approachable**
  - Answers questions
  - Willing to discuss concerns

- **Communication skills**
  - Listens and explains well

- **Available**
  - Appointments
  - Emergency backup
Some parting thoughts

- Dementia is a complex syndrome affecting all aspects of one’s function
- Successful management requires a coordinated multidiscipline team
- Caregivers are often overwhelmed and frequently experience health complications
- Many physicians are not aware of available community support for caregivers