



Long Term Care
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SCOPE of COGNITION:
The 4 D's

David W. Engleking, MD
Consulting Medical Director
AEGON



The Four D's

Delirium

Dementia

Depression

Drugs



Overview of Cognitive Disease

- **Accounts for 15% of >65 y/o population**
- **May be either acute or chronic confusional state**
- **Greatest error is confusing dementia with the other 3 D's**
- **Greatest reward is reversibility when possible**



Criteria for Differentiation

- **Onset of the Process: Slow or Fast?**
- **Course of the Process: Steady or Labile?**
- **Nature of the Process: Attention or Memory Related?**
- **Response to treatment: Immediate or Delayed?**



Delirium: An Acute Confusional State

- **Most common in patients with brain damage**
- **Sundowners common**
- **Attention span poor**
- **Emotional imbalances suggest bipolar disease**



Delirium: Four Classes

- **Infectious:** sepsis, pneumonias &/or UTI's
- **Metabolic:** renal failure, low sugar, hepatic encephalopathy
- **Structural:** CVA's, brain tumor
- **Toxic:** drugs most likely



Dementia: A Chronic Confusional State

- Attention span quite good
- Memory impaired for new learning
- Poor executive functions (planning, organizing)
- Apraxia (motor impairment); Agnosia (sensory impairment)



Dementia: 2 Major Classes with Overlap

- **Alzheimer's: most common - 3-fold higher in TIA's**
- **Vascular (multi infarct): most expensive - 2-fold higher than Alzheimer's**
- **Mixed: not uncommon**
- **Parkinson's: late finding - maybe related to drug therapy**



Depression: Pseudodementia

- Frequently (70%), co-exists with vascular dementia
- Most severely afflicted have greatest likelihood of dementia
- Psychosomatic manifestations help to differentiate
- Treat depression first with SSRI's; then dementia



Drugs: Polypharmacy is a Major Issue

- **Average elderly person takes 4.5 drugs per day**
- **63% of all medical encounters involve drugs**
- **40% of all prescriptions are either ineffective &/or complicated**
- **\$177 B is recent estimate for drug related problems**



Drugs: Impact on LTC

- 18% of all drug related problems borne by the LTC industry
- 25% of all LTC costs are drug related
- Analgesics, anti-psychotics & anti-cholinergics are the main problems
- Tremendous opportunity for proactive education / preemptive interventions