Nonpharmacologic and Pharmacologic Interventions for Behavior Symptoms in Dementia

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Dementia (1 of 1)

- According to DSM IV
  - Memory impairment and
  - Aphasia and/or
  - Apraxia and/or
  - Agnosia and/or
  - Disturbance in executive function
Dementia (2 of 2)

- Cognitive deficits must be
  - Severe enough to cause occupational and/or social impairment
  - Represent a decline from previous higher level of functioning
Dementia Types

• Alzheimer’s Dementia (55%)
• Vascular Dementia (21%)
• Frontotemporal Dementia (8%)
• Lewy Body Dementia (5%)
• Others (11%)
  – Infectious
  – Metabolic
Behavior and Psychological Symptoms in Dementia (BPSD)

- Umbrella term
  - Noncognitive symptoms and behaviors occurring in dementia
  - Also referred as “noncognitive symptoms of dementia”, “behavior problems”, “disruptive behaviors”, “neuropsychiatric symptoms”, “aggressive behavior”, and “agitation”
  - Fluctuate over time, psychomotor agitation being most persistent
BPSD

• Divided into 4 main subtypes
  – Physically aggressive behaviors
    • Hitting, kicking, biting
  – Physically nonaggressive behaviors
    • Pacing, inappropriately handling objects, wandering
  – Verbally nonaggressive agitation
    • Constant repetition of sentences or requests
  – Verbal aggression
    • Cursing, screaming
Common BPSD in Dementia

- Activity problems
  - Purposeless activity
  - Wandering
  - Inappropriate activities

- Paranoia and delusions
  - Suspicion
  - “People are stealing my things”

- Anxiety and phobias

- Aggression
  - Verbal more than physical

- Depression and hallucinations
Dementia Prevalence

- Elderly population (65+) in US
  - 35 million today
  - 70 million by 2030

- Individuals with dementia (AD and VD)
  - 3.8 million
  - 2.5 million with AD
BPSD Prevalence

- 60% to 98% of people with dementia experience some BPSD
- 33% of community dwelling people with dementia will have clinically significant BPSD
- 80% of people residing in care environments will have clinically significant BPSD
Impact of BPSD

- BPSD is often the triggering event
  - Recognition and referral
  - Families present in crisis and disarray

- BPSD is a major risk factor
  - Caregiver burden
    - Paranoia, wandering, aggression and sleep-wake cycle disturbances
  - Intitutionalization
  - Increased staff turnover
  - Worse prognosis and rapid rate of illness progression
  - Adds to direct and indirect costs of care
Theories Explaining BPSD

- Three psychosocial theoretical models
  - “Unmet needs” model
    - Frequently not apparent to observer or caregiver
  - Behavioral/learning model
    - ABC model = Antecedents → Behavior → Consequences
  - Environmental vulnerability/reduced stress-threshold model
    - Lower threshold at which stimuli affects behavior
- Not mutually exclusive
Assessing BPSD

• Recognition of BPSD
  – First and most important step

• Decide
  – Symptom of new or preexisting medical condition
  – Medication adverse effect
Nonpharmacologic Interventions (1 of 5)

- Five step approach
  - Identify the target symptoms
  - Determine when symptoms are likely to occur
  - Determine precipitants of symptoms
  - Plan interventions to reduce the precipitants
  - Consider alternative approaches if first approach fails
Nonpharmacologic Interventions (2 of 5)

- “Unmet needs”
  - Hunger, thirst, boredom, sleepy

- Environmental precipitant
  - Time change, new caregivers, new roommate

- Stress in patient-caregiver relationship
  - Inexperienced, domineering, or impairment by medical or psychiatric disturbances
Nonpharmacologic Interventions (3 of 5)

• Specific interventions
  – Sensory interventions
    • Music, massage touch, white noise, pet therapy, sensory stimulation
  – Social contact
    • One-on-one interaction, pet visits, stimulated presence and videos
  – Behavior therapy
    • Differential reinforcement, cognitive, stimulus control
  – Staff training
  – Activities
    • Structured activities, exercise, outdoor walks, physical activities
Nonpharmacological interventions (4 of 5)

- Specific interventions
  - Environmental interventions
    - Wandering areas, natural or enhanced environments, reduced-stimulation environments
  - Medical/nursing care interventions
    - Light or sleep therapy, pain management, hearing aids, removal of restraints
  - Caregiver education
  - Combination therapy
    - Individualized and group treatments
Nonpharmacologic Interventions (5 of 5)

• Advantages
  – Addresses the psychosocial/environmental underlying reason for the behavior
  – Avoids limitation of pharmacologic therapy
    • Adverse side effects, drug-drug interactions, limited efficacy
  – Medication efficacy may mask actual need by eliminating the behavior which serves as a signal for the need
Barriers to Nonpharmacological Interventions

- Communication problems
- Treating the multi-faceted person
- Discounting the needs of the patient with dementia
- Limited resources
- Limited knowledge
- Belief that it will lead to additional expenses
Pharmacologic Interventions (1 of 3)

- Typical vs Atypical Antipsychotic
  - Haloperidol (increased risk of extrapyramidal symptoms)
  - Risperdal, olanzapine (increased risk for cardiovascular and cerebrovascular events)

- Antidepressants medications
  - SSRIs, No TCAs

- Cholinesterase inhibitors
  - Donepezil, galantamine
Pharmacological Interventions (2 of 3)

• Mood stabilizers
  – Not recommended

• Memantine
  – Improves cognitive and functional domains
  – No benefit for BPSD

• Benzodiazepines
  – Not recommended, should be avoided
Pharmacologic Interventions (3 of 3)

- No psychoactive medication should be continued indefinitely
- Attempts to withdraw should be made regularly
Future Challenges (1 of 2)

• Issue of individualization and proper selection of treatment
• Specifics of interventions
• Issue of costs
• Basic understanding of quality care in dementia
• System change
• Changes in reimbursement and structure of system of care
Future Challenges (2 of 2)

• No “magic pill”
• Continue efforts to understand symptom pathophysiology
• Perform high quality trial of nonpharmacological treatment in combination with drug therapy
• Support non-industry trial aimed at treating patients with BPSD
Questions????
References


