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An Overview of Depression in LTC: Diagnosis and Management

Disclosures

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  - Prior K01 (GACA) from BHPr
  - R01 – Neuroimaging Biomarkers of ECT Response in Major Depression (MPI)
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    - Friends of NPI – Geriatric Education and Outreach Projects
    - ISCMD – Imaging Biomarker and Gene Expression Studies of ECT Response in Major Depression
- UpToDate™: Depression in Later Life Chapter
- Industry: Advisory Boards (AY 2010-2011)
  - Dey Pharma
  - Accera Pharma

Agenda

- Why does it matter?
- What is depression in LTC?
- How and when to assess?
- What are complications of depression?
- How can depression be managed in LTC?
  - Psychosocial
  - Pharmacological (Dr. Jay Luxenberg)
  - Brain Stimulation (ECT)

Epidemiology of Depression in LTC

- International Study of LTC settings[1]
  - Depressive symptoms
    - 14 – 82% (median, 29%); Most agree[2,3]: 25-40%
  - Major Depression
    - 5 – 25% (median, 12%); Most agree[2,3]: 15-20%
- During 1st year of stay[4]
  - At admission: 32.8% had depression
  - Over next year: 21.6% developed depression
- Despite high prevalence[3,5-6]
  - Under-recognized: <50% by staff
  - Under-treated: < 33% received adequate dosages

[1]Seitz D (2010) Int Psychogeriatr; [2]Borson S (1996) in Psychiatric Care in the Nursing Home; [3]Snowdon J (2010) Int Pscyhogeriatr; [4]Hoover DR (2010) Int Psychogeriatr; [5]Thakur M (2008) J Am Med Dir Assoc; [6]Kramer D (2009) Int J Psychiatry Med

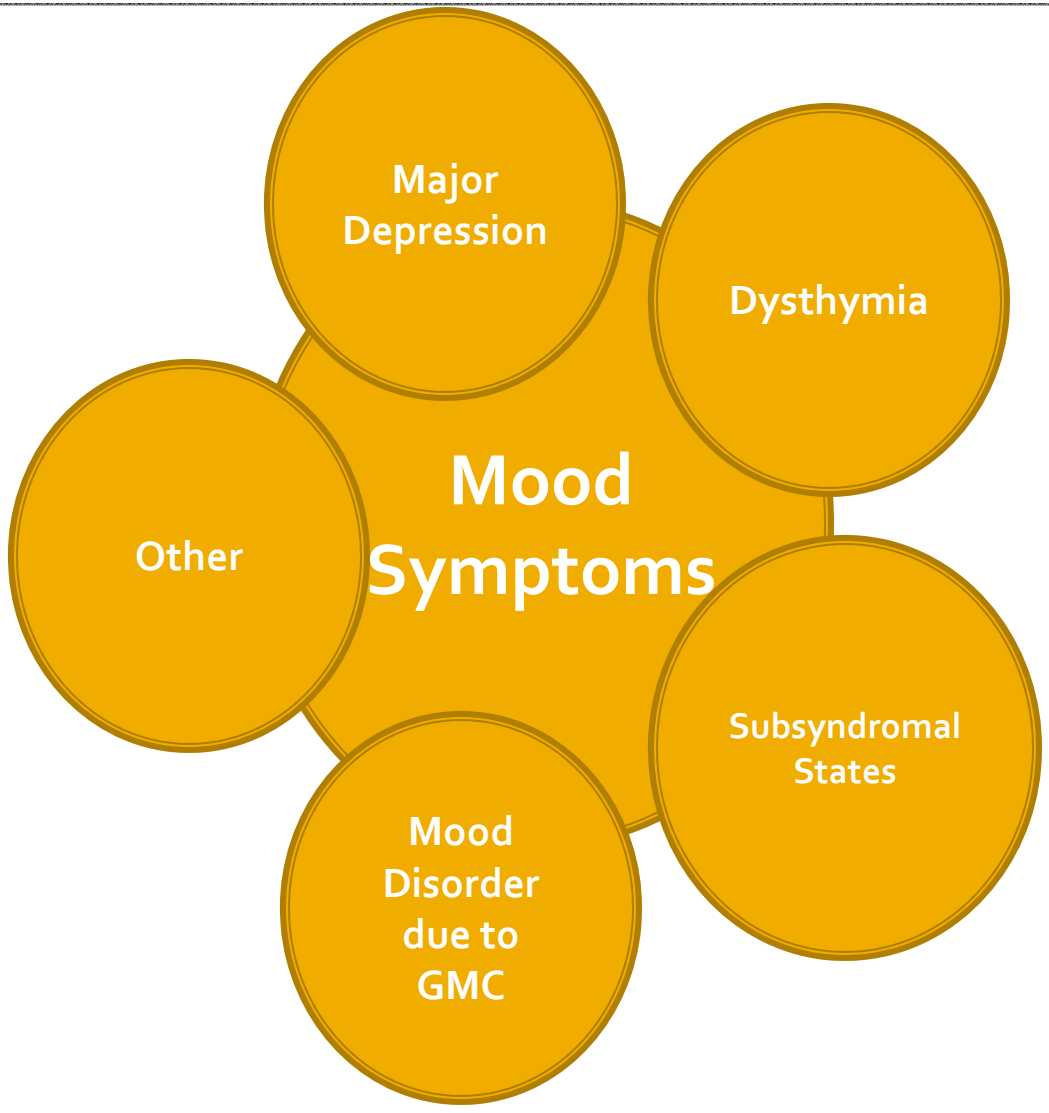
Impact of Depression in LTC

- Increased Medical and Psychiatric
  - Morbidity
  - Mortality
    - All-cause
    - CVD
    - Suicide
  - Healthcare utilization
  - Drug costs
- Decreased quality of life

Who is at risk for LLD in LTC?

- Who
  - More medically frail
    - Acute on chronic; increasing number of chronic
    - Change in functional status
    - Prior psychiatric diagnoses
  - Socioeconomically disadvantaged
    - Isolated
    - Conflicted family dynamics
    - Impoverished
  - Entering from independent living to LTC
  - Males more than females
- When
  - On admission = screen within 2 weeks
  - During first year of stay?

Presentations of Depression in LTC



Psychological

- Sadness
- Guilt
- Rumination
- Self-esteem
- Suicidal ideation

Cognitive

- Poor attention/concentration
- Memory deficits
- Slowed processing

Behavioral

- Crying
- Irritability
- Social withdrawal

Physical

- Sleep disturbances
- Appetite /weight changes
- Fatigue or energy complaints
- Pain

Presentations of Depression in LTC

- Unipolar Depression
  - Subsyndromal states
    - Do not fulfill criteria by symptom number or duration
    - Minor; Brief, recurrent; Sub threshold
    - More common in older populations
    - Adds functional burden and worsens outcomes
    - Increases risk for MDD
  - Dysthymia
  - Syndromal or Major Depression
    - DSM-IV: 5 of 9 criteria (Sig E Caps)
    - Sadness or anhedonia is required
    - Non-dysphoric ("sadless") depression may be a feature, especially in older males

Relevant Subtypes of Major Depression in LTC

- Melancholic Depression
- Mixed Anxious Depression
- Psychotic Depression
- Mood Disorder due to GMC
  - Depression in Dementia (not Dementia of Depression!)
    - Alzheimer's
    - Parkinson's
    - Vascular Dementia
  - Vascular Depression
  - Chronic or serious illness with functional impairment

Complications of Depression in LTC: Psychosis

- Prevalence
  - Up to 4% of all depressed older outpatients, but
  - Up to 45% of hospitalized older patients
  - Exact prevalence in LTC is unknown
  - Lethal form of depression (inanition, suicide)
- Presentation
  - Severe depressive symptoms including rejection of food, water, care; more cognitive impairment
  - Delusions of guilt (ruminates on past deeds), poverty, death, persecution; somatic-focused; hallucinations rarer
  - May not endorse psychotic symptoms unless specifically queried
  - Overtly delusional patient in LTC may be cooperative and "managed" because of reduced functional capacity

Complications of Depression in LTC: Psychosis

- Management
  - Must always ask specifically, repeatedly about psychosis during depression interview
  - Patients may be guarded, suspicious
    - Do not argue psychotic material
    - Instead, redirect and reframe
  - Assure adequate nourishment, care
- Treatment
  - Does not respond to placebo
  - Behavioral component focuses on safety
  - Increase observation
  - Must be aggressively treated
    - Combination of antidepressant and antipsychotic
    - ECT if life-threatening, best outcomes
    - Psychiatry referral if urgent

Complications of Depression in LTC: Suicide

- Prevalence
  - Highest rates in elderly
    - Attempts decrease but success increases
    - 1st episode of Late-life depression is particularly lethal time for many
  - Psychological autopsy: poorly identified or not diagnosed; under or inappropriately treated
- LTC settings
  - Limited data: 2% of all suicides; 1-11% of elderly suicides may occur in nursing homes; most are male
  - Successful methods
    - Indirect life-threatening behavior
    - Jumping, hanging, overdose, cutting

Complications of Depression in LTC: Suicide

- Assessment
  - Current suicidal episode
    - Ask about suicidal intent and plan
    - Distinguish between wish to die from actual SI
    - Document acute and chronic risk factors
    - Ask if patient would call for help; who would they call, what they would do if ideas became intense
    - Help normalize distress of SI; patient is often ashamed
  - Past history of suicide (if applicable)
    - When and how
    - Outcome
  - Protective factors
  - Assess "Reasons for Living"

Complications of Depression in LTC: Suicide – Risk Factors

Acute	Chronic
Active symptoms •Suicidal ideation •Hopelessness •Impulsivity •Insomnia or sleep disturbance •Restlessness or agitation •Anxiety, fear or panic •Psychosis •Intoxication •Poorly controlled pain •Delirium Organized or lethal plan Recent loss or widowhood Recurrence of cancer Failure of cancer treatment	Social isolation Financial strain Past psychiatric history (mood, schizophrenic, substance abuse, or personality disorder) Past history of suicide attempt Family history of suicide Past use of opioid analgesics, CNS depressants, or benzodiazepines Poorer physical functioning or impairment Chronic or multiple medical illness Chronic pain Prior brain injury Metastatic or advanced oncologic disease

Complications of Depression in LTC: Suicide

- Management
  - Treat modifiable risk factors
  - Communicate with staff on all shifts but respect and honor privacy; help contain patient fear, anxiety and hopelessness
  - Implement behavioral plan
    - Control access to meds, check belongings, check restrooms and windows
    - Increase observation, e.g. move closer to nurse's station, get sitter
  - Involve family (if available)
  - Address spiritual needs (if appropriate)
- Not all SI patients require ER or IP Psychiatric care. Consider MH referral when:
  - Immediate SI concern cannot be safely addressed by current staff or environment
  - SI management fails and safety concern persists

Differential Diagnosis of Depression in LTC: Medical

- Medical
  - Metabolic derangement
  - Nutritional deficiencies
  - Cardiovascular disease
  - Pulmonary disease
  - Hematological conditions
  - Cancer
    - Pancreatic
    - Occult
  - Endocrinopathies
  - Inflammatory disease
  - Infections
  - Musculoskeletal disease
- Neurological
  - TBI
  - Stroke
  - Primary or metastatic tumor
  - Neurodegenerative disease
- Pain
  - Chronic
  - Poorly-treated
- Medications
  - Side-effects
  - CNS depressants
  - Opiates

Differential Diagnosis of Depression in LTC: Psychiatric

- Anxiety Disorders
- Adjustment Disorders
- Substance Use Disorders
  - Withdrawal
  - Intoxication
  - Toxicity
- Personality Disorders
- Delirium
- Dementia

Differential Diagnosis of Depression in LTC: Situational

- Loneliness
- Life circumstances
  - Financial strain or worry
  - Conflicts with family: beware of abuse!
- Grief, Bereavement and Mourning
  - Due to actual loss of loved one (death)
  - Due to loss of independence, role, or identity
  - Due to medical problem
    - Functional loss
    - Psychological loss
  - However, complicated bereavement requires monitoring and possible treatment/referral.

Challenges to Diagnosis of Depression: Comorbid Medical Illness

- Look for psychological and behavioral components of depression, not just neurovegetative symptoms
- Physical symptoms predating mood symptoms usually implies a reaction to illness
- However, if mood symptoms predate or co-vary with physical symptoms, think depression

Challenges to Diagnosis of Depression: Comorbid Medical Illness

- Depressed patients:
  - Cannot point to other reasonable causes for symptoms
  - Symptoms appear out of proportion to what is expected for level of illness
  - May reject help or treatment
    - No PT, OT
    - No visits with or pleasure from family
    - No laughter or response to humor
  - Fail usual medical treatments

Challenges to Diagnosis of Depression: Comorbid Psychiatric Illness

- Depressive symptoms obscured by comorbid psychiatric disorder(s)
  - Dementia: apathy
  - Anxiety: fear reactions, somatization
  - Psychosis: withdrawal, paranoia
  - Personality: ineffective coping and symptom expression
  - Substance use: unrecognized
- Other psychiatric dysfunction fosters strong counter-transference reactions
  - Inappropriate labeling: Complainer, nasty, angry
  - Shorter visits, avoidance
  - Inappropriate prescribing

Challenges to Diagnosis of Depression: Concomitant Medications

- Polypharmacy
- Pharmacodynamics
  - Fatigue
  - Insomnia
  - Loss of appetite
  - Constipation
  - Anxiety or restlessness
  - Mental clouding

Challenges to Diagnosis of Depression in LTC

- Age or cohort effects
  - Less psychological openness
  - Viewed as characterological flaw or weakness
- Gender effects
  - Men: non-dysphoric or angry states
  - Women: more somatic focus
- Culture effects
  - Somatic expression of psychological distress
  - Less accepting of psychological care
- Providers and family
  - Therapeutic nihilism
  - Belief that reasons to be depressed are valid – FALSE!
  - Nursing homes are depressing for them

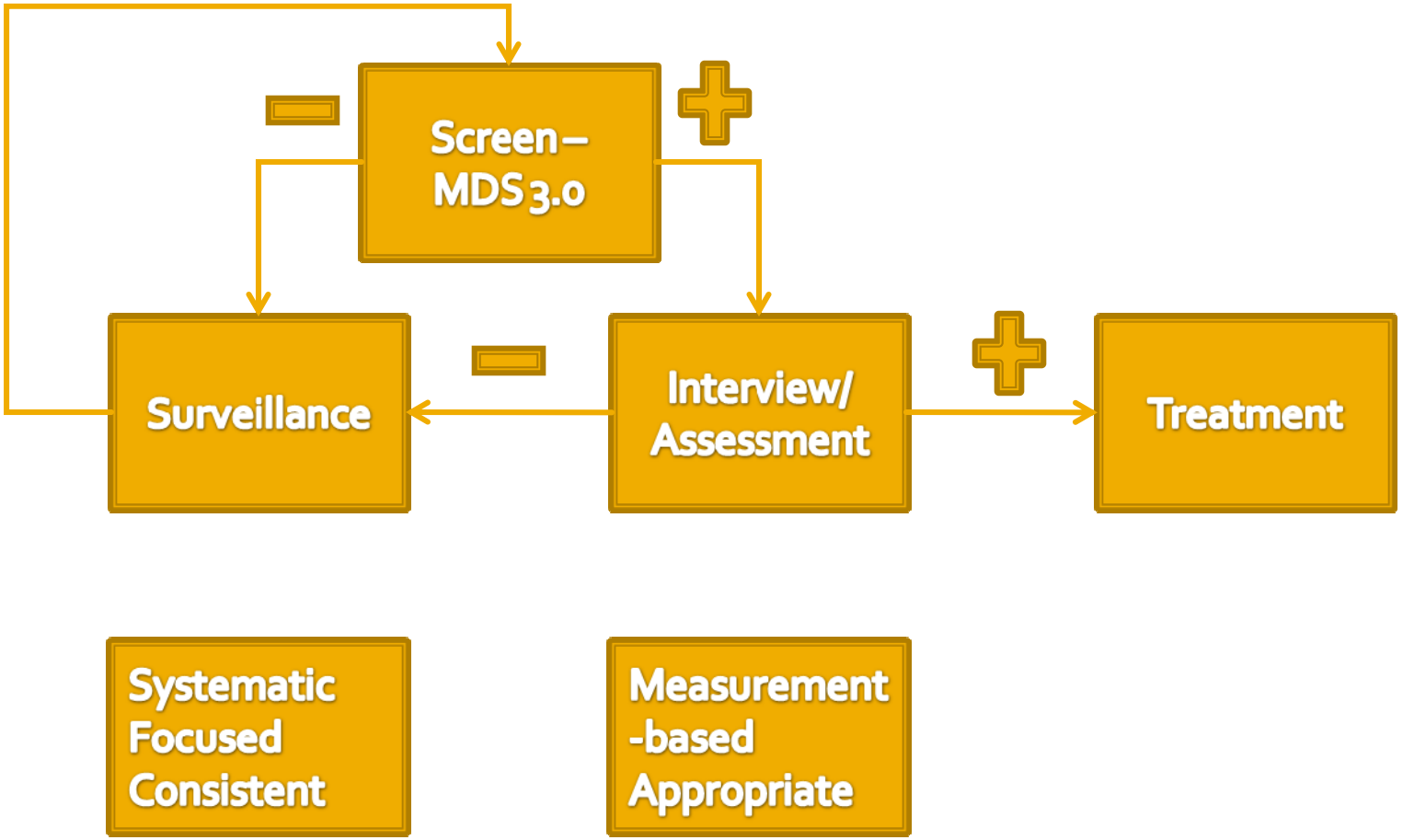
Diagnosis of Depression in LTC: Screening and Surveillance

- Admission NH
  - High risk period
  - MDS 3.0 within 2 weeks of admission
    - Incorporates PHQ-9
    - Requires follow-up and clinical interview
- Periodically thereafter
- Any change in behavior

Diagnosis of Depression in LTC: After MDS 3.0

- Clinical interview
  - Patient
  - Collaterals: daily care partners, family/visitors
- Behavioral and functional measures
  - Activity log (OT, PT schedule)
  - Oral intake and weight (weekly)
  - Time out of bed or room

Assessment and Management of Depression in LTC



Management of Depression in LTC: Overview

- Psychosocial
- Pharmacological (Dr. Luxenberg)
- Brain Stimulation (ECT)

Management of Depression in LTC: Psychosocial Approaches

- Behavioral
  - Socialization/engagement
  - Pleasant Events Schedule
  - Exercise
    - Aerobic vs strength-training
    - Wheelchair bicycle
- Psychological
  - Types: individual, group
  - Modalities:
    - Manualized: CBT, PST, IPT
    - Supportive, Dignity, Insight-oriented, Life review

Brain Stimulation Therapies in Psychiatry

Type	Full Name	Year Developed	FDA (Depression)	Indication(s)	Invasive/ Anesthesia	Causes Seizure	Efficacy in Elderly
ECT	Electroconvulsive Therapy	1938	1979*	MDD; TRD; Catatonia, NMS, others	Yes; G.A. per session	Yes	Yes
VNS	Vagus Nerve Stimulation	1988^	2005	Failure to ≥ 4 antidepressant trials	Yes; G.A. at device implant	No	Unknown
rTMS	Transcranial Nerve Stimulation	1985	2008	Failure to 1 adequate AD trial	No	No	Possibly
DBS	Deep Brain Stimulation	1997†	No	None yet; Probably OCD, TRD	Yes; G.A. at wire implant	No	Unknown
MST	Magnetic Seizure Therapy	1999	No	None yet; Same as ECT?	Yes; G.A. per session	Yes	Unknown

*Devices classified as Class III
^Applied in Epilepsy
†Approved for Essential Tremor
G.A. – General Anesthesia

Electroconvulsive Therapy in LTC

- Diagnoses
  - Major Depression
    - Psychotic Depression
    - Catatonic Depression
  - Treatment-Resistant Depression
  - Suicidal Depression
- Primary Criteria
  - Need for rapid, definitive response
  - Patient preference
- Secondary Criteria
  - Treatment-failure

Advantages of ECT for LTC Patients

- Rapid, definitive response
  - Days to weeks
  - Meds: 8-12+ weeks
- Superior efficacy in non-TRD cases (80-90%)
  - Catatonia – nearly 100%
  - Psychotic depression – over 90%
- Good efficacy in TRD cases (50-60%)
- Good tolerability
- Good safety profile
- Older age may be a predictor of response
- Unfortunately, ECT is under-utilized in LTC
  - Access problem?
  - Familiarity problem?

Work-up for ECT

- Psychiatry consult
  - Identify diagnosis, timing, need
  - Begin consent process, assure compliance
- Pre-op for an elective, non-cardiac procedure
  - Basic H&P
  - Labs/studies (absolute): k+, therapeutic drug monitoring, 12-lead EKG
  - All else on individual case basis
  - Not required: CXR, neuroimaging, spine X-rays
- Anesthesiology assess patient separately for anesthesia risk (airway management, etc)
  - Masked ventilation only
  - No intubation routinely

Risks, Side-effects of ECT in LTC

- Minor side-effects
  - Time-limited
  - Tolerable
  - Of concern in older pts: falls
- Major side-effects
  - Medical complications are rare
    - Mortality: 1 in 100k patients, or 1 in a million treatments
    - Major complications: CV or pulmonary, not CNS
    - No absolute contraindications, only relative
  - Cognitive side-effects remain a concern
    - Anterograde and retrograde amnesia over index ECT series
    - After 1 year, about 30-35% report ongoing memory gaps but, importantly, no functional impairment

ECT Treatment for LTC Patients

- Actual treatment session
  - NPO after MN as done under general anesthesia
  - Extensive hemodynamic monitoring
  - Time elements
    - Seizure: 30-60 sec
    - General anesthesia: 5-8 minutes
    - Procedure room: 20-25 minutes
    - Recovery 30-60 minutes
- Index phase
  - Can be IP or OP (for LTC pt could be)
  - 6-12 treatments
  - 2-3 times per week
- Maintenance phase
  - May or may not include medications
  - ECT at lowest frequency to maintain benefit (e.g. titration to monthly or less)
- Biggest obstacles for LTC patients:
  - Reliable transportation to ECT facility
  - Staff familiarity with ECT preparation

Thank you! Any questions?