



PSYCHIATRIC SYNDROMES OF ELDERLY

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POTENTIAL CONFLICTS OF INTEREST...

THE COMPLEX NATURE OF GERIATRIC DEPRESSION

DEPRESSION AND THE ELDERLY

- Depression is a common problem among older adults. At least 8–25% of older adults in the general population may experience depression. (Kessler et al., 1994)
- Depression in late life is associated with negative outcomes, including but not limited to increased disability and higher rates of mortality. (Charney et al., 2003)
- Older patients with depressive symptoms report nearly twice the functional impairment of older adults without depressive symptoms.

MEDICAL COMORBIDITY

- Chronic depression more medical morbidity
- Six or more depressive symptoms, more (1) comorbid illness; (2) cognitive impairment; (3) functional impairment
- Longer hospital stays prolonged medical recovery

UTILIZATION

- Increases perception of poor health
- 75% primary care distressed over-utilizers clinically significant depression
- 2x number of appointments / year (5.3 / 2.9)
- Medical costs 2x non-depressed with similar medical morbidity

COMPLETED SUICIDE

- More frequent elderly
- **20.1** / 100,000 >65 years old vs. **12.2** / 100,000 general population
- White males >65 highest rate
- Fewer attempts more lethal

CAREGIVERS

- 25% of caregivers develop depression after NH placement
- Care recipient behavioral problems increase risk
- Limited support family and friends increase
- Male caregivers underreport
- African American report less than whites

DEPRESSION VERSUS SADNESS

- “I am depressed” versus “I am sad”

Sadness	Normal healthy response to life
Grief	Response to loss
Remorse	Healthy response to errors in speech thought or action

HOW IS DEPRESSION DIFFERENT FROM SADNESS?

- Sustained low mood for 2 week+ period
- Cluster of symptoms
 - Changes in sleep or appetite
 - Low energy
 - Suicidal thoughts
 - Loss of interest or pleasure
 - Lack of concentration or attention
 - Feeling worthless or guilty



DEPRESSION: A MEDICAL SYNDROME

- Affects “Emotional Brain” “Thinking Brain” “Memory”
- Occasionally cause is known (drugs, medical condition)
- More often not known (Nobel Prize)

DEPRESSION

- Cause of depression is occasionally known
 1. Psychological factors
 - Related to coping to chronic illness
 2. Biological factors (Hypothyroid, etc.)
- More often not known (Nobel prize)

WHAT ELSE IS DEPRESSION?

- Distorted thinking

**The true
bad stuff**

VS.

**The stuff
that isn't so**

- Lack of context

**“All bad,
No good”**

DISTORTED THINKING

- Filtering
 - Filtering out positive aspects

- Overgeneralization

“I’ve failed at everything”

- Catastrophizing

“My life is bad no matter what”

- Emotional reasoning

“If I feel it, it must be true”

PROVIDING DEPRESSION SUPPORT

- Validate

“You feel what you feel.”

- Offer hope

“Being wrong about something bad might be good...”

- Encourage healthy dependency needs

“It’s not bad to get help for physical or emotional needs.”

- Rehab model of therapy
(Physical, occupational, speech, psychotherapy)

- Encourage questioning false assumptions

WHY THE ABOVE MIGHT NOT WORK

- DEPRESSION ITSELF AFFECTS ABILITY TO PROCESS
- MAY REQUIRE AGGRESSIVE TREATMENT
- PSYCHOSIS
- DEMENTIA

WHAT IS PSYCHOSIS?

- Hallucinations
 - Perception of something that's not there
- Delusions
 - Fixed false belief
- By definition, prevents reasoning if not treated
- Mood congruent or incongruent
- POVERTY/ ILLNESS/ GUILT (Miss the psychosis “Of course they think that. They’re depressed.”)



SUICIDE WARNING SIGNS

- Warning signs for serious suicidal ideation:
 - Talking about death/dying often
 - Thinking about methods
 - Planning for death
 - Giving away precious items
- Ntnl Suicide Prevention Hotline: (800) 273-TALK
- National Hopeline Network: (800) SUICIDE
- PDF HelpLine: (800) 457-6676

DEPRESSION DUE TO A GENERAL MEDICAL CONDITION

HAVE A MEDICAL CONDITION PHYSIOLOGICALLY RELATED TO DEPRESSION:

- VIRAL INFECTION

ENDOCRINOPATHY—HYPOTHYROIDISM, HYPERTHYROIDISM, HYPOPARATHYROIDISM, HYPERPARATHYROIDISM, HYPOADRENOCORTICISM, HYPERADRENOCORTICISM, CUSHING'S DISEASE

MALIGNANT DISEASE—LEUKAEMIA, LYMPHOMA, PANCREATIC CANCER

CEREBROVASCULAR DISEASE—LACUNAR INFARCTS, STROKE, VASCULAR DEMENTIA MYOCARDIAL INFARCTION

METABOLIC DISORDER—B12 DEFICIENCY

MALNUTRITION

SUBSTANCE INDUCED DEPRESSION

- SAD MOOD OR DIMINISHED INTEREST OR PLEASURE IN ALL OR ALMOST ALL ACTIVITIES
- WITHIN A MONTH OF SUBSTANCE INTOXICATION OR WITHDRAWAL
- OR MEDICATION USE CAUSALLY RELATED TO THE DEPRESSION

MEDS

- METHYLDOPA
- BENZODIAZEPINES
- PROPRANOLOL
- RESERPINE
- STEROIDS
- ANTI-PARKINSONIAN DRUGS
- CIMETIDINE
- CLONIDINE HYDRALAZINE OESTROGENS
PROGESTERONE TAMOXIFEN VINBLASTINE
VINCRISTINE DEXTROPROPOXYPHENE

NOT OF MUCH USE DIAGNOSTICALLY

- TREAT ENDOCRINOPATHY, ETC.
- IF POSSIBLE TRY TO REMOVE OFFENDING MEDS (BETA BLOCKERS, ETC.)
- STIMULENTS

LATE ONSET DEPRESSION

- Less Frequent FH of Mood Disorder
- Higher Prevalence of Dementia
- Cognitive Impairment after episode likely to progress to Dementia (40% 3 yr follow up)
- Cognitive impairment that resolves after episode frequently develop dementia
- RISK FACTOR VS PRODROME?

EXECUTIVE FUNCTION

- Planning
- Attention
- Problem Solving
- Verbal Reasoning
- Inhibition
- Mental Flexibility, Multi-tasking
- Initiation
- Monitoring Of Actions
- Context (Green traffic light changing to yellow)

EXECUTIVE FUNCTION AFFECTS OUTCOMES IN DEPRESSION

- Abnormal initiation and perseveration scores, but not memory impairment, were associated with relapse and recurrence of **geriatric depression** and with fluctuations of depressive sx
- Memory impairment, disability, medical burden, social support, and history of previous episodes did not significantly influence the outcome of depression in this sample.
- **Conclusions:** Executive dysfunction was found to be associated with relapse and recurrence of geriatric major depression and with residual depressive symptoms

EXECUTIVE FUNCTION & ANTIDEPRESSANT RESPONSE

A number of studies have shown that executive dysfunction in late-life depression predicts poor response to antidepressant medication.

Lockwood et al., 2002; Alexopoulos et al., 2005;
Sneed et al., 2007

Problem solving therapy in patients with executive dysfunction



- 221 older depressed patients with low I/P scores and low Stroop Color Word scores
- 12 weeks treatment with PST or ST
- Similar response at 6 weeks, but greater response for the PST group at 9 and 12 wks
- 12-week response rate 56.7% for PST and 34.0% for ST

Areán et al AJP 2010;167:1391-98

STROOP COLOR WORD

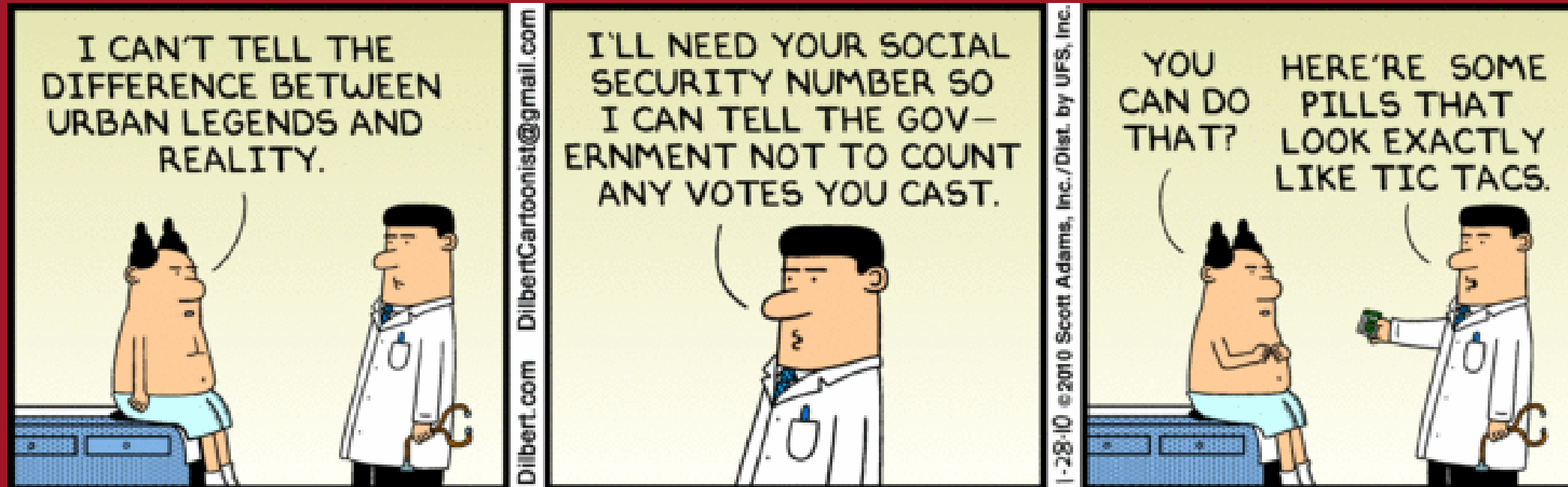
- Red Blue Green Orange
- Red Blue Green Orange

DEPRESSION AFFECTS EXECUTIVE FUNCTION

Depressed older subjects score significantly worse on neuropsychological tests that require intact executive functioning.

Tasks of response initiation and inhibition, active switching, processing speed, and complex mental manipulation (Lockwood et al 2002)

IMPRESSIONABLE



DED VS DEPRESSED CONTROLS

- Depressive symptomatology, and especially psychomotor retardation and loss of interest in activities, contributed to disability in DED patients.
- These depressive symptoms did not influence the functioning of depressed patients without significant executive impairment.

DEPRESSION-EXECUTIVE DYSFUNCTION SYNDROME OF LATE LIFE

- Based on observations that patients with frontal lobe lesions tend to misinterpret their environment
- Patients had “frontal sx” but also met criteria for MDD

George S. Alexopoulos, M.D.

Am J Geriatr Psychiatry 10: 1, January-February 2002

CAVEAT

- “The term ‘executive functions’ is an umbrella term comprising a wide range of cognitive processes and behavioral competencies, and the ability to deal with novelty”
- Significant Heterogeneity in literature based on definition and methods of study

DEPRESSION-EXECUTIVE DYSFUNCTION SYNDROME

- Reduced fluency
- Impaired visual naming
- Psychomotor retardation
- Loss of interest in activities
- Paranoia
- Rather mild vegetative syndrome

DEPRESSION EXECUTIVE FUNCTION AND SUICIDE

- Impaired impulse control (Response Inhibition)
- Limited repertoire of response to stressors
- Increased risk of relapse
- Poor response to antidepressants
- Is this an additive risk?

COGNITIVE PERFORMANCE IN SUICIDAL DEPRESSED ELDERLY: PRELIMINARY REPORT.

- Case Control Design
- Suicide attempt within 3 months of the assessment or suicidal ideation with specific plan, serious enough to precipitate an inpatient admission, and a score of 18 or greater on the Mini-Mental State Exam (MMSE; actual range: 18–30).²⁴
- 32 inpatients aged 60 and older diagnosed with major depression with (N=5) and without (N= 21) psychotic features, adjustment disorder with depressed mood (N = 1), depression secondary to medical condition (N=2), and depressive disorder not otherwise specified (N=3)
- A total of 32 age-, gender-, and education-equated comparison patients with major depression. Fifteen (47%) of the 32 depressed comparison subjects were assessed as inpatients; most of them were admitted for treatment-resistant depression or depression with comorbid anxiety disorders and serious physical illness, or because of a lack of social supports, or of non-adherence to outpatient care.
- Elderly depressed patients with suicide attempts and severe suicidal ideation demonstrate poorer cognitive and, particularly, executive performance compared to non-suicidal depressed elderly.
- “These differences are not explained by the burden of physical illness, severity of depression, presence of clinical dementia or other cognitive disorders, effects of substance use, or psychotropic medication exposure.”

A Dombrowski et al

Am J Geriatr Psychiatry. 2008 February; 16(2): 109–115.

DRUGS AND EXECUTIVE FUNCTION

- HARD to find drugs that improve executive function
- EASY to find drugs that WORSEN it
- GABA (Valium, Ativan, Xanax, Klonopin)
- Anticholinergic drugs
- BBB “If it can get into the brain it usually affects the brain”
- Paradoxical rxn:” NOT THAT PARADOXICAL “

TAKE HOME

- Patients with normal measures of other cognitive function may have impaired executive function
- Combined with depression may lead to increased risk due to decreased repertoire of response, paranoia and problems with impulse control
- Pharmacotherapy should take executive function into account when treating depression

OLDER AGE IS ASSOCIATED WITH RAPID REMISSION OF DEPRESSION AFTER ELECTROCONVULSIVE THERAPY: A LATENT CLASS GROWTH ANALYSIS

ECT DEPRESSION

- 120 Patients
- Prospective Multicenter Collaborative
- Three Classes Based upon Rate of Remission
- Rapid Remission Group Remit 80%
- Older Age Associated with This Group Even When Adjusted for Confounders

ECT

- Gadd45b “demethylation gene” upregulated
- Neurogenesis in dentate gyrus upregulated
- BDNF and fibroblast GF upregulated

(Nature Reports Stem Cells - published online: 8 January 2009 | doi:10.1038/stemcells.2009.15
How brain activity makes new neurons, Monya Baker)

MELANCHOLIA

- Previous Good Response to ECT
- Vegetative sx
- Diurnal Mood Variation
- Psychomotor Retardation

PSYCHOTIC DEPRESSION

- Must treat psychosis for depression to get better
- AP and antidepressant or ECT
- Mood congruent may miss

ECT

- Melancholia
- Psychotic Depression
- Catatonia
- ?Neurological Conditions

ECT NEUROLOGICAL

- Parkinson's
- NMS
- TBI Aggressive Behavior
- Epilepsy
- Some Delirium

“MODECT”

Early- and Late-Onset Depression in Late Life: A Prospective Study on Clinical and Structural Brain Characteristics and Response to Electroconvulsive Therapy

ANNEMIEK DOLS, M.D., PH.D AM J GERIATR PSYCHIATRY 25:2, FEBRUARY 2017

WHY IMPORTANT?

- LOD WORSE RESPONSE TO MEDS
- LOD VASCULAR RISKS, WHITE MATTER LESIONS ON MRI
- LOD ASSOCIATED WITH NEURODEGENERATIVE DISEASE
- PRODROME VS RISK FACTOR DEMENTIA
- HYPOTHESIS: LOD MORE SOMATIC BURDEN, AGE RELATED MRI, POOR RESPONSE TO ECT

LLD: EOD VS LOD

- AGE OF ONSET <55 VS >55
- TWO SITES RR SIMILAR AROUND 78.2%
- LOD 86.9 % EOD 67.3%
- CLINICAL SOMATIC MRI SIMILAR
- CONCLUSION: LOD RESPONSE TO ECT IS HIGHER IRREGARDLESS OF VASCULAR BURDEN!

TAKE HOME

- DED: INCREASED RISKS OF SUICIDE
- POORER RESPONSE TO MEDS IN LOD AND DED IN PARTICULAR
- CONSIDER REFERRAL FOR NEUROPSYCH ASSESSMENT OF EXECUTIVE FUNCTION
- PROBLEM SOLVING THERAPY

TAKE HOME CONT'D

- STRONGLY CONSIDER ECT REFERRAL
- ASSESS FOR PSYCHOSIS (MOOD CONGRUENT / OR INCONGRUENT)
- ASSESS FOR MELANCHOLIA
- CATATONIA: REFER

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