UVM Project ECHO:
Adult Complex Mental Health

Course Co-Directors:	Mark Pasanen, MD Sara Pawlowski, MD
ECHO Director:	Elizabeth Cote
Series Faculty:	Evan Eyler, MD,MPH Suzanne Kennedy, MD Jess Oehlke, MD Kathy Mariani, MD Jennifer Hall, DO Jessica O'Neil, DO

The University of Vermont
LARNER COLLEGE OF MEDICINE
OFFICE OF PRIMARY CARE & AHEC PROGRAM

Project ECHO
University of Vermont

Session Agenda

- Welcome
- Objectives
- Didactic Presentation (30-35 min)
- Case presentation(s)
  - Clarifying questions
  - Participants – then faculty panel
- Discussion
- Recommendations
- Closing Announcements
  - Submission of new cases
  - Completion of evaluations

Series Objectives

Learning objectives for this ECHO series include the ability to:

- Enhance diagnostic skills in patients with complex mental health issues
- Incorporate new treatment strategies into management of common but challenging mental health disorders
- Improve the care that patients with mental health issues receive in the primary care setting

CMIE Disclosures

University of Vermont (UVM) Office of Continuing Medical and Interprofessional Education (CMIE) is approved as a provider of Continuing Medical Education (CME) by the ACCME. UVM designates this internet live activity for a maximum of 1.5 AMA PRA Category 1 Credits.

UVM CMIE is accredited by the American Nurses Credentialing Center (ANCC) to provide CE for the healthcare team. This program has been reviewed and is acceptable for up to 1.5 Nursing Contact Hours.

As a Jointly Accredited Organization, The Robert Larner College of Medicine at the University of Vermont is approved to offer social work continuing education by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program. Organizations, not individual courses, are approved under this program. State and provincial regulatory boards have the final authority to determine whether an individual course may be accepted for continuing education credit. The University of Vermont maintains responsibility for this course. Social workers completing this course receive 1.5 continuing education credits.

This activity was planned by and for the healthcare team, and learners will receive 1.5 Interprofessional Continuing Education (IPCE) credit for learning and change.

Participants should claim only the credit commensurate with the extent of their participation in the activity.

CMIE Disclosures

Interest Disclosures: As an organization accredited by the ACCME to sponsor continuing medical education activities, UVMCMIE is required to disclose any real or apparent conflicts of interest (COI) that any speakers may have related to the content of their presentations.

Meeting Disclaimer: Regarding materials and information received during this educational event, the views, statements, and recommendations expressed during this activity represent those of the authors and speakers and do not necessarily represent the views of the University of Vermont.

UVM Project ECHO: Treatment Resistant Depression in Primary Care

A Evan Eyler, MD, MPH
Professor of Psychiatry, LCOM, UVM
February 16, 2022

The University of Vermont
LARNER COLLEGE OF MEDICINE
OFFICE OF PRIMARY CARE & AHEC PROGRAM

Project ECHO
University of Vermont

Session Objectives

Learning objectives for this ECHO session include the ability to:

1. Define treatment resistant depression (RD) from a primary care perspective.
2. List several alternatives to MDD in the differential diagnosis of RD.
3. List several lifestyle factors that interfere with recovery from RD.
4. List several options to consider in treatment of RD.

Resistant Depression

- Symptoms of depression
- Burdensome to the patient
- Interfering with function
- Not “new” to treatment
- Psychotherapy/pharmacotherapy/both
- For our purposes today, also not psychotic or cognitively impaired (but please do check)

- “Failure to achieve remission after two well-established anti-depressant treatment courses known to have been of EB acceptable dose and duration” -- Greden et al, U Mich Depression Center

Depressed, Not Getting Better

Example #1

- LN is a 24 year-old graduate student seeking treatment for depression. He reports that he is always depressed but that some of the time this is of sufficient severity that he falls behind in his thesis work and has to make a lot of excuses. Sometimes, he feels just the opposite for a week or so, gets a lot done and has his best ideas.

Example #2

- BC is a 42 year-old former retail worker and married mother of 2 adolescent daughters. She is seeking treatment for depression and anxiety. When asked about a typical day, she reports that she stays in her room and usually in her bed. She watches TV and reads on her tablet. She has started seeing a therapist, now that remote access sessions are an option. She has had trials of antidepressant medications in 3 different classes.

Example #3

- TR is a 40 year-old mechanic who is in residential addiction treatment regarding an alcohol use disorder. He was referred for treatment of depression after “screening positive” in the initial session with a LADC. He endorses many of the symptoms of depression, stating that they have been present for a long time. He also reports suffering from severe insomnia since age 15, since a motor vehicle accident in which his best friend was killed.

Example #4

- MC is a 26 year-old mother of 3 young children. She is seeking treatment for depression, which is longstanding. She has been treated with a variety of anti-depressant medications and has been seen for psychotherapy off and on for years. On gathering of additional history, she reports that her early life was difficult, characterized by chronic neglect and intermittent abuse. She has had to move her family twice in the last year due to lack of financial resources.

Resistant Depression: Partial Differential Dx

- Bipolar II or other cyclic mood disorder
- Trauma sequelae, including PTSD, struggles with a borderline dynamic
- Mixed anxiety and depression, panic disorder/agoraphobia, avoidance
- Substance use disorders
- Overwhelmed by life or life events. “Adjustment disorder”
- Combination of disorders/contributing factors
- “Uncomplicated” resistant depression

Additional Evaluation

- Baseline scale re: severity of depressive episode.
- Evaluate for hx hypomania (or possibly mania) MDQ? MoodTracker?
- Evaluate anxiety component. GAD-7?
- Assess trauma contribution. PC-PTSD-5, ACE (adults)
- Substance use history/current contribution.
- Typical day – a very important aspect of evaluation
- How many times per day/week/month do you leave your home?
- Social support, social determinants of mental health
- Other medical factors, esp re: sleep/OSA Epworth?
- Treatment history; suicide attempt/near-attempt history

Next Steps: Formulation and Planning

- Reflect formulation back to patient in a supportive manner, emphasizing strengths despite burden of symptoms.
- Establish reasonable goals.
- Discuss contributions of trauma and daily routine in a supportive and non-judgmental manner, normalizing responses despite need for change.
- Discuss next steps in treatment.
- “Do something different,” usually starting a new treatment modality.

Next Steps: Daily Routine and Logistics

- Work toward resuming an “up for the day” time of 9 AM or earlier. “It’s harder to recover from depression while living on Tokyo time.”
- Work toward leaving the house every day, for at least 15 minutes.
- The usual advice about smoking and exercise is accurate, but it will often not be feasible as a first step. Caution regarding “too much.”
- Behavioral Activation Therapy?
- Apps? Community Health Team?
- Case manager though a mental health center or other program?

Next Steps: Psychotherapy/Support

- Psychotherapy: CBT, IPT, BAPT, CBT-I, Mindfulness. Supportive may be helpful but evidence base is thinner.
- Manuals and Apps.
  - https://reading-well.org.uk/books/books-on-prescription
  - Manage Your Mood (Veale et al)
  - Overcoming Depression, 3rd ed (Gilbert)
  - NHSUK recommends Headspace app for Mindfulness.
  - Breaking Free from Depression: Pathways to Wellness (Wright & McCray)
  - Feeling Good/Great (Burns)
- Case management, social work

Next Steps: Pharmacotherapy Targets

- Antidepressant options
- Bipolar depression
- Augmentation of anti-depressant pharmacotherapy
- PTSD
- Anxiety
- Sobriety maintenance

Antidepressant options

- SSRI
- SNRI
- NDRI
- Mirtazapine (a-2 antagonist, dual S-N agent)
- Vortioxetine (SSRI/5HT1a/3 agonist, a “serotonin modulator”) – UKNHS now recommends in cases with MDE and 2 other medications not successful.

Bipolar Depression

- Depression: Lurasidone, quetiapine, olanzapine/fluoxetine.
- Maintenance: Lithium, lamotrigine, aripiprazole
- Newest: cariprazine, lumeteperone
- Many other options

- Bipolar II: Consider quetiapine, lamotrigine, lithium

Antidepressant Augmentation

- “Combination treatment”
  - SSRI + NDRI (bupropion, ?atomoxetine)
  - NDRI + serotonergic agent (SSRI, buspirone)
  - Venlafaxine + mirtazapine
  - Caution re: excess serotonergic or noradrenergic effects
- Mood-stabilizing antipsychotic medication – start low
  - Aripiprazole, brexipiprazole, quetiapine, risperidone, etc.
- Add lithium (esp FH bipolar, recurrent depression) - start low
- Add thyroid (historically triiodothyronine) esp if TSH is high or ULN.
- Add buspirone (esp. if anxious)
- Add medication for sleep? (or refer for evaluation)
- Stimulant if depression-related cognitive problems or co-occurring ADHD.

Pharmacotherapy re: Anxiety and Trauma

- PTSD
  - Prazosin – 1-15 mg QHS, can use BID, cautions: orthostasis, discontinuation
  - SSRI/SNRI
  - Maybe mood-stabilizing antipsychotic medications ("2nd generation")
  - Not cannabis or benzodiazepines.
- Anxiety
  - SSRI, SNRI
  - Buspirone
  - Gabapentin – off label.
  - Benzodiazepines: Cautions, but may be necessary in some cases.

Sobriety Maintenance Agents - Alcohol

- Naltrexone
- Acamprosate
- Topiramate

Next Steps: Intensive Treatment

- Other medication options, including MAO
- Intensive Outpatient Treatment (IOP)
  - UVMMC Seneca Center, Crossroads, etc.
- Addiction treatment
  - Residential
  - IOP
- Ketamine
- Neurostimulation/Neuromodulation
  - rTMS
  - ECT
  - Etc.

Ketamine/esketamine

- Mechanism of action not definitely known
  - Opioid receptor agonist, NMDA receptor agonist, AMPA receptor activation, cingulate cortex activation, increase in connectivity between the insula and the default network, neuronal endothelial growth factor signaling, etc.
- Rapid but possibly short-term relief of suicidal ideation
- Administration by multiple routes
  - IV 1-3 times weekly for up to 6 weeks
  - Intranasal: 56 mg, then 84 mg if tolerated, 2x/wk x 4, then weekly x 4, then every 1-2 wks.
- SE:
  - Short-term: Dissociation, dysphoria, HTN, N/V, dizziness, HA, blurred vision
  - Long-term: Hepatotoxicity, neurotoxicity, bladder toxicity, abuse/diversion
- Not much data yet re: continuation/maintenance treatment

Neurostimulation/Neuromodulation

- rTMS
  - Approved re: MDD and at least one failed trial of pharmacotherapy
  - Usually have had multiple trials and often other modalities
- ECT
  - Should be considered if 2-3medication trials w/o sufficient effect or if significant functional impairment
  - Or sooner if depression is life-threatening, severe suicidality, psychosis, catatonic features, etc.
  - Also helpful in older adult population.
  - May be effective even if other factors are present, though in that case would likely not be a sole modality.
- Subject of an upcoming discussion in this series

Conclusions/Take-Home Points

1. Treatment resistant depression is a heterogeneous group of diagnoses and problems presenting with a common chief complaint.
2. Additional evaluation can often be conducted in family medicine/internal medicine, though may take time.
3. Contextual and historical factors often are key.
4. When depression is not getting better, “Do something different.”

A few references, in addition to the slides

- NHSUK re: depression
- https://www.nhs.uk/mental-health/conditions/clinical-depression/overview
- This is the AAFP Topic Module re: Depression and Bipolar Disorder:
- https://www.aafp.org/afp/topicModules/viewTopicModule.htm?topicModuleId=6
- Another AAFP article with links to patient ed materials:
- https://www.aafp.org/afp/2018/1015/p508.html

A few references, in addition to the slides

- FDA consumer reference re: bipolar disorder:
- https://www.fda.gov/consumers/consumer-updates/facts-bipolar-disorder-and-fda-approved-treatments
- Bipolar depression:
- https://www.tandfonline.com/doi/full/10.1080/03007995.2019.1636017
- Chessick CA, et al. Azapirones for generalized anxiety disorder. Cochrane Database Syst Rev. 2006.
- Delle Chiaie R, et al. Assessment of the efficacy of buspirone in patients affected by generalized anxiety disorder, shifting to buspirone from prior treatment with lorazepam: a placebo-controlled, double-blind study. J Clin Psychopharmacol. 1995 Feb;15(1):12-9.

CONCLUSIONS

- Slides are posted at www.vtahec.org
- Volunteers to present cases (this is ***key*** to the Project ECHO model)
  - Please submit cases to Mark.Pasanen@uvm.edu
- Please complete evaluation survey after each session
- Once your completed evaluation is submitted, CE information will be emailed.
- Please contact us with any questions, concerns, or suggestions:
  - Mark. Pasanen@uvm.edu
  - Elizabeth.Cote@uvm.edu