AES
AMERICAN EPILEPSY SOCIETY

DEPRESSION IN ADULT EPILEPSY

Features of Depression in Adult Epilepsy

Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure:

- Depressed (sad, empty, tearful) or irritable mood
- Appetite disturbance (including weight changes)
- Lack of pleasure in doing things that normally bring joy
- Sleep disturbance (insomnia or hypersomnia)
- Feelings of worthlessness, guilt and/or hopelessness
- Psychomotor agitation or slowing
- Overwhelmed by negative and worrisome thoughts
- Fatigue or loss of energy
- Recurrent thoughts of death
- Problems with memory and concentration

In adults with epilepsy, cognitive symptoms such as perceived difficulty with attention and memory are not unusual. In addition, patients with depression are more likely to report physical symptoms such as pain and headaches and to report more physical adverse events to their medication.

Epidemiology

- Depression or depressive symptoms are one of the primary comorbid psychiatric conditions in adults with epilepsy, and numerous studies report depression is associated with an increased risk of epilepsy.
    - More adults with epilepsy have depression (23%) compared to adults without co-morbid disease (3.2%).
    - Up to 33% of people with epilepsy experience suicidal thoughts. In the majority, these present as passive suicidal thoughts (e.g., "I'd be better off dead"), but active suicidal ideation (e.g., "I am thinking on how I can kill myself") can be reported by 5 to 10% of patients.
    - Suicide accounts for 11.5% of deaths in epilepsy (compared to 1% of all deaths in the general population) and people with temporal lobe epilepsy are at an even greater risk.
- Risk factors and etiologies of depression in epilepsy are multifactorial, and include neurobiological variables (e.g., seizure type and frequency, chemical changes in the brain associated with the seizure disorder, and medication loads); familial/genetic influence; and psychosocial (e.g., loss of independence, social isolation, adverse socioeconomic conditions) influences.

Diagnostic Considerations for Depressive Symptoms in Adult Epilepsy

- Some of the anti-seizure medications (ASMs) have side-effects that can be similar to symptoms of depression, including feeling sad, fatigued, having difficulty falling asleep or sleeping too much, slow thinking, difficulty concentrating, feeling irritable, having poor or excessive apetite. Furthermore, in people with a prior history of depression and /or a family history of depression, certain ASMs can cause psychiatric adverse events mimicking a depressive episode. Therefore, it is important to establish a prior personal and /or family history of depression.
- Because symptoms may change over time, and suicide risk is a crucial issue, patients should be routinely assessed.
- **Assessment Tools**
    - Depression can be reliably and briefly evaluated in adults with epilepsy in several ways.
    - Free Surveys/Self-Report Instruments
        - The Neurological Disorders Depression Inventory for Epilepsy (NDDI-E) is a publicly available 6-item self-report specific to adults with epilepsy. This tool is a reliable depression screen and Item 4 specifically screens for suicide risk.
        - The Patient Health Questionnaire-9 (PHQ-9) is a publicly available 9-item self-report that is used across studies in the Managing Epilepsy Well Network due to its reliability and ease of use.
        - Both the NDDI-E and PHQ offer 2-item forms for more rapid evaluation in a primary care setting.
    - Standardized Interviews
        - The Mini International Neuropsychiatric Interview is an excellent method for diagnosing depression, screening for suicide, and evaluating for other co-morbid psychiatric disorders.
            - The MINI requires administration by a trained healthcare professional and takes approximately 15 minutes.

Treatments for Depressive Symptoms in Adult Epilepsy

Treatment of depressive symptoms may minimize the development of psychiatric and physical adverse events of ASMs. It may improve the patient's quality of life and self-assessment abilities.

Psychological Interventions

- Comprehensive epilepsy care involves routine screening for depression. Optimal treatment involves both psychological interventions and medications. Cognitive-behavioral therapy (CBT; including behavioral activation), self-management and psychoeducational approaches, and mindfulness have all been shown to effectively reduce depression in adults with epilepsy.

- Mindfulness interventions have been shown to prevent depressive episodes in non-depressed adults with epilepsy.

- These interventions can take place individually or within small groups and are often equally effective.

Pharmacological Interventions

- In RCT studies of individuals with primary depression (without epilepsy), the most effective treatment for depression in adults combines psychotherapy and pharmacotherapy. In some patients pharmacologic treatment with antidepressants or cognitive behavior therapy may be sufficient to yield remission of symptoms of depression. However, some patients may require both forms of therapy, particularly if they have suffered from a chronic depressive disorder.

- In general, most research supports using second-generation SSRIs and SNRIs as first-line treatments for depression in epilepsy, paying specific attention to potential pharmacokinetic interactions, measuring plasma drug levels, and when possible, selecting antidepressants with the least amount of interaction potential.

Resources and Links

- https://www.epilepsy.com/learn/challenges-epilepsy/moods-and-behavior provides an overview of mood and mood disorders for people with epilepsy.
- The **Managing Epilepsy Well Network** provides resources for epilepsy self-management and problem-solving, including help for depression: http://managingepilepsywell.org/resources/index.html
- **Project UPLIFT** is an effective program for treating and preventing major depression in people with epilepsy: http://managingepilepsywell.org/programs/uplift.html
- **PACES in Epilepsy** is an effective program for treating depression and overcoming other life problems in people with epilepsy: http://managingepilepsywell.org/programs/paces.html
- **The Feeling Good Handbook** (1999) by David D. Burns is a self-help book based on cognitive-behavioral therapy.
- **Apps like CBT-I Coach and Breathe2Relax** can be used to support depression treatment (available in iTunes and Google Play stores).

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Disclaimer: This information sheet is designed to serve as a quick reference resource for clinicians. It is not intended to establish a community standard of care, replace a clinician's medical judgment, or establish a protocol for all patients. The clinical conditions contemplated by this information sheet will not fit or work with all patients. Approaches not covered in this information sheet may be appropriate.