Anxiety

Definitions

Generalized Anxiety Disorder (GAD)

- Diagnostic Criteria**:** Excessive anxiety and worry occurring most days for at least six months, difficult to control, and associated with symptoms such as restlessness, fatigue, difficulty concentrating, irritability, muscle tension, and sleep disturbance.
- GAD impacts daily functioning, including social and occupational domains.

Panic Disorder

- Characterized by recurrent unexpected panic attacks, which are sudden episodes of intense fear accompanied by physical symptoms like palpitations, sweating, and shortness of breath, feeling of choking, chest discomfort
- Patients often develop avoidance behaviors, fearing situations where an attack might occur.

Social Anxiety Disorder (SAD)

- Involves intense fear of being negatively judged or humiliated in social situations. Patients often avoid public speaking, meeting new people, or other social events.
- Can severely limit occupational and social functioning if untreated.

Others: Specific phobias, Agoraphobia, Separation Anxiety Disorder

APA, DSM-5, 2013

Tools for Screening

Common screening tools:

- GAD-7: A 7-item scale used to assess the severity of generalized anxiety disorder.
- PHQ-9: Primarily used for depression but also effective in screening for anxiety symptoms.
- PHQ-PD: For screening for panic disorder

Who to Screen

USPSTF Recommendation: In June 2023, the USPSTF recommended screening for anxiety:

- All adults aged 19 to 64, including pregnant and postpartum individuals. The screening aims to identify generalized anxiety disorder, panic disorder, and social anxiety disorder.
- >65 years – insufficient evidence

U.S. Preventive Services Task Force. (2023)

Anxiety: Score, Category, Rx

GAD-7 Score	Severity Classification	Recommended Rx
0-4	Minimal Anxiety	No Rx. Self-care, monitor
5-9	Mild Anxiety	Supportive therapy,psychoeducation, self-help strategies recommended. Monitor for changes
10-14	Moderate Anxiety	CBT and/or Rx (SSRI/SNRI) recommended. Close monitoring
15-21	Severe Anxiety	CBT + Rx

Lifestyle Interventions

Lifestyle changes can play a significant role in managing anxiety symptoms:

- Exercise: Regular physical activity has been shown to reduce anxiety by regulating neurotransmitters and increasing neurogenesis.
- Sleep: Poor sleep exacerbates anxiety symptoms; good sleep hygiene is crucial.
- Diet: The SMILES trial showed significant improvement in mental health with a modified Mediterranean diet.
  - The diet emphasized whole foods: vegetables, fruits, whole grains, nuts, legumes, fish, and olive oil.

Exercise

Types of Exercise:

- Aerobic Exercise (e.g., running, cycling): Most research focuses on aerobic activities, which are strongly associated with reductions in anxiety.
- Resistance Training (e.g., weight lifting) and Yoga: Emerging evidence suggests that these forms of exercise can also be beneficial in managing anxiety

Level of Evidence:

- Strong Evidence for aerobic exercise
- Moderate Evidence for resistance training and yoga

Stubbs et al., *Psychiatry Research*, 2017, Vol 249: 102-108

Non-Pharmacological Management: Cognitive Behavioral Therapy

- CBT is the most effective psychotherapy for anxiety
  - Helps patients identify and modify distorted thought patterns and develop coping mechanisms.
- Benefits include long-term reduction of symptoms and lower relapse rates compared to medication alone.
- Online CBT can be just as effective as face-to-face treatment

First Line Meds

First-line treatments:

- SSRIs
- SNRIs

Second Line Options

TCAs

Non-SRI

- Mirtazapine
- Vilazodone
- Bupropion

Anticonvulsants

- Gabapentin
- Pregabalin

Antihistamines

2nd Generation Antipsychotics

- Aripiprazole
- Quetiapine

Other

- Propranolol
- Buspirone

Limited role for benzodiazepines (short term only)

Combination Therapy

- Combining CBT with pharmacotherapy (SSRIs or SNRIs) is often more effective than either treatment alone, particularly for patients with severe or treatment-resistant anxiety.
- Combination therapy can lead to faster symptom reduction and lower relapse rates.

Strawn JR, et al. J Affect Disord, 2021, Vol 298(Pt A): 292-300

Complementary and Alternative Therapies

A variety of complementary and alternative therapies are available for management of GAD and PD, although most have limited evidence including:

- Ashwagandha*, Camomile extract*, Kava Kava, Lavender extract*, Passion flower, St. John's wort, Valerian, 5-HT, Magnesium*

* Appears effective though studies at high risk of bias

Barić H, Đorđević V, Cerovečki I, et al. Adv Ther. 2018;35(3):261-288

Ketamine

Mechanism of Action:

- Ketamine works by blocking NMDA receptors, affecting the brain's glutamate system. This leads to rapid antidepressant and anxiolytic effects.

Potential Use for Anxiety:

- Although primarily approved for treatment-resistant depression, research is exploring ketamine's role in treatment-resistant anxiety disorders such as GAD and social anxiety disorder.

Glue P, Medlicott NJ, Harland S, et al. Journal of Psychopharmacology. 2017;31(10):1302-1305.

Reducing Risk of Relapse

- After initial remission: continue Rx regimen for at least 12 months
- After a first relapse: consider 18-24 months or lifelong
- After a second relapse: Lifelong Rx may be needed
- Gradual tapering over several months is recommended to avoid withdrawal symptoms and reduce relapse risk

References: NICE 2020 GAD and Panic Disorder Guidelines, 2022 DSM 5-T-R, AAFP 2022 GAD and Panic Disorder in Adults

Depression

Diagnostic Criteria and Terms

- Major Depressive Disorder (MDD)
  - characterized by depressed mood (or irritability in children) and or loss of pleasure or interest
  - Present for at least two weeks.
  - Accompanied by at least 3 of 5 of the following that is present most days
    - Weight loss and or change in appetite
    - insomnia or hypersomnia
    - psychomotor retardation or agitation
    - fatigue or loss of energy
    - excessive or inappropriate guilt or feelings of worthlessness
    - indecisiveness or in diminished ability to concentrate or think
    - recurrent thoughts of death or suicidal ideation or suicidal plan or attempt
- Symptoms cause significant stress or functional impairment
- Not attributable to effects of a substance or another medical condition

Diagnostic Criteria and Terms

- Persistent Depressive Disorder
  - characterized by depressed mood most of the time for at least two years
  - Accompanied by at least 2 of the following
    - Feeling hopelessness
    - insomnia or hypersomnia
    - overeating or poor appetite
    - fatigue or loss of energy
    - low self esteem
    - indecisiveness or poor concentration
  - No gap in these symptoms for more than two months, hypomanic or manic episode cannot be present during this time period, no criteria met for cyclothymic disorder, further symptoms are not better explained by another disorder, cannot cause significant impairment in functioning or distress, and are not due to different medical condition or substance

History and Exam

History

- Obtain from patient, family, caregivers.
- PMH, PSH, FMH, Allergies, Social Hx
- Meds, supplements, vitamins
- substance use
- herbs/supplement use
- SIGECAPS
- How does it impact their life and their various realms
  - social, occupational, work or school, personal life
  - GAF score
- work/home schedule
- exercise level
- Social support
- stressors (work, home, social)
- prior treatment history
- relationships
- SI, HI, Mania, Psychosis, prior trauma/abuse
- coping mechanisms
- resources

Screening Tools

- PHQ9
- Hamilton Depression Rating Scale
- GAD 7 (anxiety)
- MDQ (mood disorders questionnaire)
- Geriatric depression scale
- Beck Depression Inventory
- EPDS (pregnancy and postpartum)

Exam

- Vitals, CV exam, Lungs, thyroid
- Neuro exam: CN, Alertness, strength, abnormal movements, tone, reflexes, ridgidity
- Psych exam
  - mood
  - affect
  - eye contact
  - speech
  - mannerisms
  - interactions
  - malingering?
  - dress, grooming, hygeine
  - judgement
  - insight
  - Actively suicidal/homicidal
  - mania
  - hallucinations/delutions/paranoa
  - anxious/fidgety
  - inattentiveness
  - sensorium

Evaluation and Management

Non Pharmacological

- Counseling referral - Cognitive behavioral therapy or behavioral therapy
  - Licensed professional counselor
  - Clinical psychologist
  - Yourself
- Meditation
- Exercise
- Light therapy
- Yoga
- Relaxation techniques
- Mindfulness techniques
- Hobbies
- Social interactions

Pharmacological Options

- 1st line: SSRI or SNRI or atypical antidepressants (Bupropion, or Mirtazapine)
  - Switch to another agent if not working. Switch to different class if 2 drugs did not work of if issue.
  - Can consider SSRI/Partial 5HT1a agonist (vortioxetine, vilazodone)
- Next - Consider combination therapy of two 1st line agents
  - Do not combine SSRI/SNRI type meds.
- Next - Augment with SGA (second generation antipsychotics) if combination therapy was inadequate
  - Ariprazole, olanzapine, quetiapine, risperidone, brexpiprazole
- Next - Augment with TCAs
  - amitriptyline, nortriptyline
- Next - Consider T3 or stimulant if still not at goal.
- Continue successful regimen till remission achieved for 6 months (1 year in select patients) prior to considering weaning

Weaning Meds

- Consider if stable for 6 months if new onset.
- Consider if stable for 1-2 or more years for chronic cases
- If any regression, go back to dose that was effective.
- Taper strategies:
  - A: 10% reduction per week
  - B: three to four month taper with reduction of dose by 25% every four weeks or by 12.5% every two weeks
  - C: cross taper, slowly decrease dose of current medication while increasing dose of new medication
  - D: direct switch, immediately start new medication after discontinuing current one
  - E: moderate switch, current medication taper down followed by washout period of two to three days, new medication initiated at conservative dose then increased
  - F: conservative switch: current medication taper down followed by washout period of four to five half lives, new medication initiated conservative dose, then increased

Visit Frequency

- q 2-4 weeks after changes
- q 3 months once improved
- q 6 months if stable for over 2 years
- Monthly while weaning or de-escalation of therapy.

When to Refer

- Poor control despite 3 to 4 drugs from different classes for 3-6 months
- Worsening symptoms
- Multiple comorbid issues such as poor support, substance abuse, prior sexual abuse or trauma
- Consideration of Ketamine, ECT, lithium, TMS
- Acute psychosis, mania, suicidality, homicidal ideations
- Poor control, poor social support, poor coping mechanisms

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