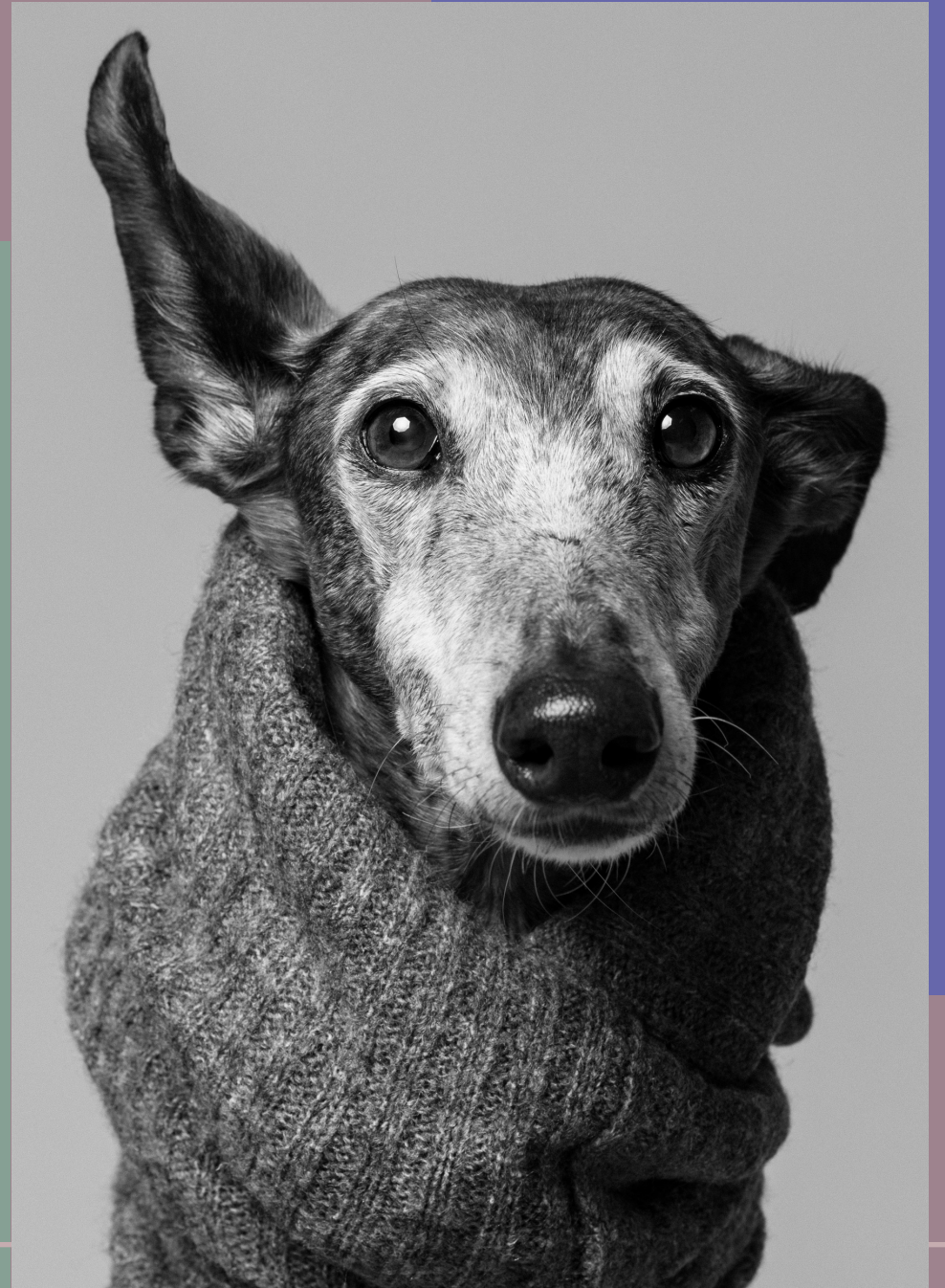




DEPRESSION AND BURNOUT
UPDATE 2022

Nothing to disclose
No big sponsorships



SYMPTOMS:

SIGECAPS: SLEEP; INTEREST; GUILT; ENERGY; CONCENTRATION; APPETITE; PSYCHOMOTOR;
SUICIDE/SUBSTANCES

LOSS OF INTEREST IN ACTIVITIES AND RELATIONSHIPS

FEELINGS OF SADNESS, HOPELESSNESS, OR EMPTINESS

LOSS OF SEX DRIVE

INSOMNIA, OR SLEEPING TOO MUCH

EMOTIONAL OUTBURSTS, EVEN OVER INSIGNIFICANT MATTERS

CHRONIC MENTAL AND/OR PHYSICAL EXHAUSTION

CHANGES IN APPETITE

INCREASED ANXIETY

AGITATION OR RESTLESSNESS

FEELINGS OF WORTHLESSNESS

LOW SELF-ESTEEM

SHORT-TERM MEMORY LOSS

INABILITY TO THINK STRAIGHT

FIXATING OR RUMINATING ON FAILURES OR PAST EVENTS

PHYSICAL SYMPTOMS SUCH AS BACK PAIN, NECK PAIN, OR HEADACHES WITH NO KNOWN CAUSE

CHRONIC FEELINGS OF UNHAPPINESS

FEELING "NUMB"

THOUGHTS OF SUICIDE, ATTEMPTS OF SUICIDE, OR DEATH BY SUICIDE

Patient Health Questionnaire-2 (PHQ-2)

Share

The PHQ-2 inquires about the frequency of depressed mood and anhedonia over the past two weeks. The PHQ-2 includes the first two items of the PHQ-9.

- The purpose of the PHQ-2 is to screen for depression in a “first-step” approach.
- Patients who screen positive should be further evaluated with the PHQ-9 to determine whether they meet criteria for a depressive disorder.

Over the last 2 weeks , how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3
2. Feeling down, depressed or hopeless	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3

PHQ-2 score obtained by adding score for each question (total points)



Interpretation:

- A PHQ-2 score ranges from 0-6. The authors identified a score of 3 as the optimal cutpoint when using the PHQ-2 to screen for depression.
- If the score is 3 or greater, major depressive disorder is likely.
- Patients who screen positive should be further evaluated with the [PHQ-9](#), other diagnostic instruments, or direct interview to determine whether they meet criteria for a depressive disorder.

Patient Health Questionnaire-9 (PHQ-9)

Share

The PHQ-9 is a multipurpose instrument for screening, diagnosing, monitoring and measuring the severity of depression.

Over the last 2 weeks , how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3
2. Feeling down, depressed or hopeless	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3
3. Trouble falling asleep, staying asleep, or sleeping too much	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3
4. Feeling tired or having little energy	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3
5. Poor appetite or overeating	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3
6. Feeling bad about yourself - or that you're a failure or have let yourself or your family down	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3
7. Trouble concentrating on things, such as reading the newspaper or watching television	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3
8. Moving or speaking so slowly that other people could have noticed. Or, the opposite - being so fidgety or restless that you have been moving around a lot more than usual	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3
9. Thoughts that you would be better off dead or of hurting yourself in some way	<input type="radio"/> 0	<input type="radio"/> +1	<input type="radio"/> +2	<input type="radio"/> +3

Interpretation

Provisional Diagnosis and Proposed Treatment Actions

PHQ-9 Score	Depression Severity	Proposed Treatment Actions
0 – 4	None-minimal	None
5 – 9	Mild	Watchful waiting; repeat PHQ-9 at follow-up
10 – 14	Moderate	Treatment plan, considering counseling, follow-up and/or pharmacotherapy
15 – 19	Moderately Severe	Active treatment with pharmacotherapy and/or psychotherapy
20 – 27	Severe	Immediate initiation of pharmacotherapy and, if severe impairment or poor response to therapy, expedited referral to a mental health specialist for psychotherapy and/or collaborative management

SUICIDE

Call the National Suicide Prevention Lifeline at
1-800-273-8255 or text 741-741 or HELLO.

TALKING ABOUT:



- ▷ Wanting to die
- ▷ Great guilt or shame
- ▷ Being a burden to others

FEELING:



- ▷ Empty, hopeless, trapped, or having no reason to live
- ▷ Extremely sad, more anxious, agitated, or full of rage
- ▷ Unbearable emotional or physical pain

CHANGING BEHAVIOR, SUCH AS:



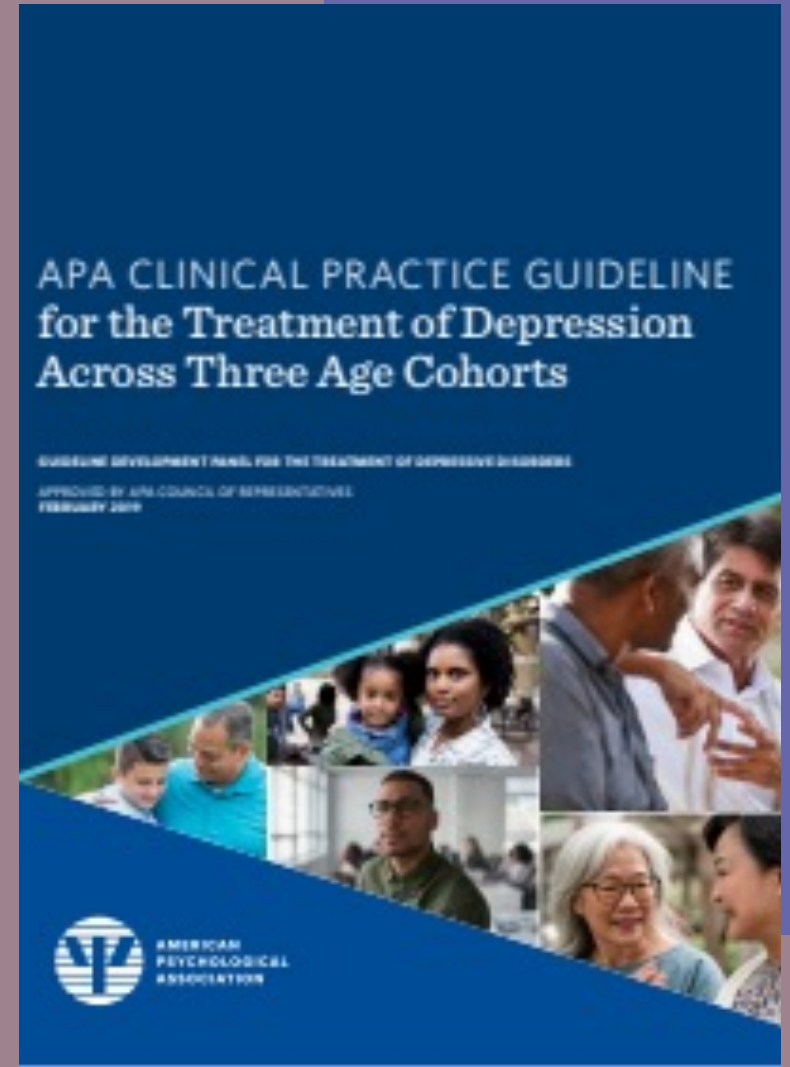
- ▷ Making a plan or researching ways to die
- ▷ Withdrawing from friends, saying good bye, giving away important items, or making a will
- ▷ Taking dangerous risks such as driving extremely fast
- ▷ Displaying extreme mood swings
- ▷ Eating or sleeping more or less
- ▷ Using drugs or alcohol more often

American Psychological Association

ADOLESCENTS

For initial treatment of adolescent patients with depressive disorders the panel recommends that clinicians offer one of the following psychotherapies/interventions: • Cognitive-behavioral therapy • Interpersonal psychotherapy adapted for adolescents (IPT-A)

The panel recommends fluoxetine as a first-line medication compared to other medications for adolescent patients with major depressive disorder, specifically when considering medication options. Paroxetine second line.



ADULTS

Offer either psychotherapy or second-generation antidepressant.

- Behavioral therapy
- Cognitive, cognitive-behavioral, and mindfulness-based cognitive-therapy
- Interpersonal psychotherapy
- Psychodynamic therapies
- Supportive therapy

If considering combined treatment, the panel recommends cognitive-behavioral therapy or interpersonal psychotherapy plus a second-generation antidepressant.

CAM therapies
Exercise Monotherapy
St. John's Wort Monotherapy

Yoga
Bright light therapy
Acupuncture

OLDER ADULTS

- Either group life review treatment or Group Cognitive Behavioral Therapy (either alone or added to usual care)
 - Combined pharmacotherapy and Interpersonal psychotherapy
- Of note, while the study upon which this is based used nortriptyline, the panel recommends a second-generation antidepressant due to the reduced risk of side effects.

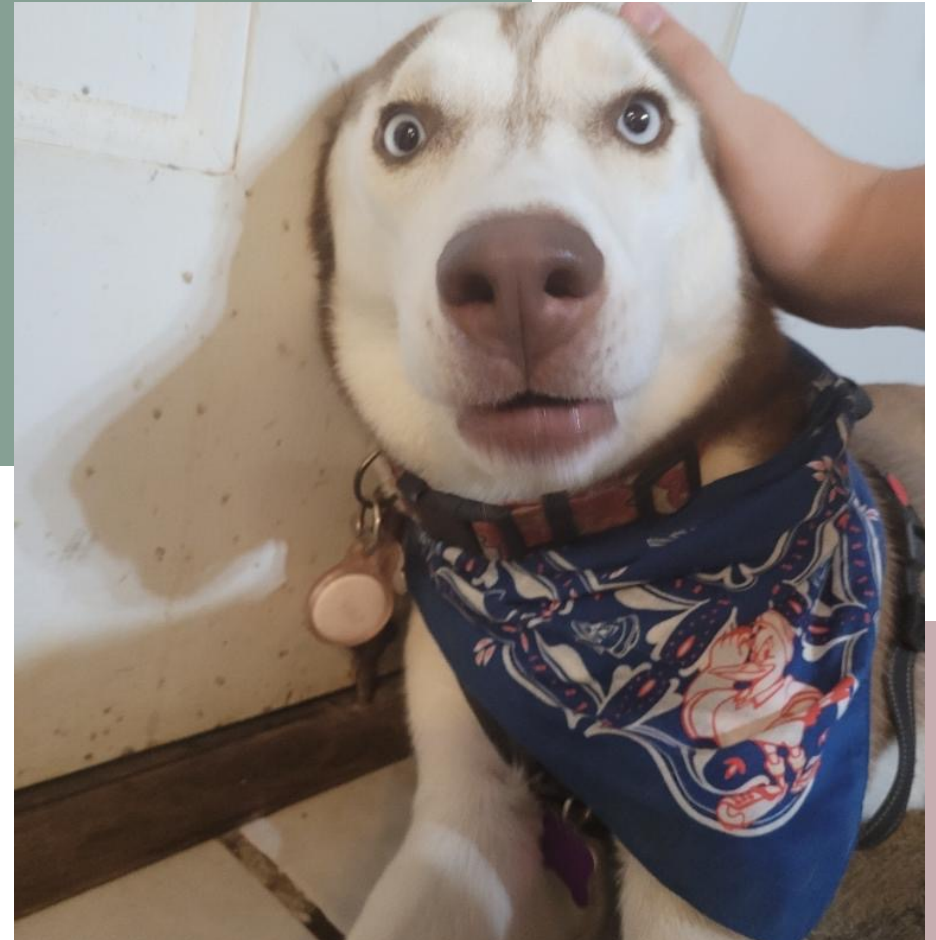


The background features a solid blue gradient. Overlaid on this are numerous thin, white, wavy lines that flow from the left side towards the right, creating a sense of movement and depth. The lines are most concentrated in the lower half of the image, where they form a large, undulating shape that resembles a wave or a stylized mountain range.

NEW STUFFS

There are no new leads in the prevention and early intervention of depression in children and adolescents. For acute treatment of major depressive disorder, talking therapies are moving increasingly to internet-based platforms. Family therapy may have a slight edge over individual psychotherapy in the short-term. Patients with severe depression with endogenous features have a more robust response to pharmacotherapy than do patients with mild-to-moderate depression. Findings in relation to reward sensitivity and changes in brain-derived neurotrophic factor levels contradict research conducted in adults, suggesting developmental differences in the mechanisms underlying depression. Ketamine infusion could have a role for adolescents with treatment refractory depression.

Hazell P. Updates in treatment of depression in children and adolescents. *Curr Opin Psychiatry*. 2021 Nov 1;34(6):593-599. doi: 10.1097/YCO.0000000000000749. PMID: 34456305.



Brain-derived neurotrophic factor (BDNF) is one of the neurotrophic factors that support differentiation, maturation, and survival of neurons in the nervous system

KETAMINE

Esketamine (Spravato™) nasal spray

Esketamine (Spravato) is administered as a nasal spray.

It uses only the "S" molecule rather than the combination of both R and S. This form of ketamine treatment is FDA approved; however, there is far less research on its effectiveness in treating depression.

The two forms of ketamine interact differently with brain receptors, and the delivery method (IV versus nasal spray) also affects the drug's effectiveness as well as side effects. Four providers in Hawaii.

IV Ketamine is not FDA approved. Ketamine IV infusion targets NMDA receptors in the brain to increase glutamate in the space between neurons. Glutamate activates connections in another receptor called the AMPA receptor. Working in unison, these NMDA and activated AMPA receptors release additional molecules that help neurons communicate along new pathways. This complex process is called synaptogenesis, and it affects mood, cognition, and thought patterns. \$350-\$650/session. Six sessions over 2-3 weeks.

MERT

MeRT, or Magnetic e-Resonance Therapy, combines three procedures:

[Transcranial Magnetic Stimulation](#) (TMS, an FDA cleared therapy),

Quantitative Electroencephalogram (qEEG), and

Electrocardiogram (ECG/EKG).



HOME STIMULATION ?

Fisher Wallace Stimulator® is cleared by the FDA to treat depression. Proven in multiple clinical trials, the majority of patients experience results in two weeks. The device is also indicated by the FDA to treat anxiety and insomnia - the only medical device category of its kind. \$299, takes 20 min in am



GENETIC TESTING

Which medications do you process faster or slower?

Can cost over \$300, depending on insurance

Not yet common practice, but a good idea if finding effective medication challenging



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NEW DRUG???

NEW MECHANISM??

James Bibb, Ph.D., and colleagues have described a novel preclinical drug that could have the potential to combat depression, brain injury and diseases that impair cognition. The drug, which notably is brain-permeable, acts to inhibit the kinase enzyme Cdk5.

Cdk5 negatively impacts neuronal survival, migration and differentiation, axonal and neurite growth, synaptogenesis, oligodendrocyte differentiation, synaptic plasticity and neurotransmission by phosphorylating key proteins. Bibb and colleagues now report details of their anti-Cdk5, brain-permeable compound, 25-106. They also show that systemic administration of 25-106 alters neurobehavior in mice, reducing anxiety-like behavior.

