

Panic attacks: Help sufferers recover with cognitive-behavioral therapy

Empower patients by teaching them to manage their fears

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ith panic attacks, alarming physiologic symptoms mount swiftly—tachycardia, chest pain, sweating, trembling, smothering or choking, dizziness, fear of losing control or going crazy—even fear of dying.1 Patients constantly fear the next attack, worry about its consequences, and change their behaviors to avoid or withdraw from anxiety-provoking situations.

To relieve their suffering, cognitive-behavioral therapy (CBT) may offer benefits you would not realize with medication alone. CBT can:

- improve long-term patient outcomes
- enhance medication management
- boost treatment response when medication alone is inadequate
- ease drug discontinuation.²

Whether you or a CBT-trained psychothera-



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Box 1

Panic disorder: Who are typical patients?

Panic attacks typically begin between ages 10 and 40. The cause is unknown, but evidence points to multiple factors, including heredity, neurobiology, provocations, and psychological conditioning (*Box 2*).²⁹ Lifetime prevalence is approximately 5%,¹⁰ and about three-fourths of panic disorder patients are female.¹¹

Comorbidity. Up to 50% of persons with panic disorder also experience agoraphobia. Depression, other anxiety disorders, and substance abuse may complicate the clinical picture.

pist guides the sessions, you can achieve optimal results for your patients with panic disorder.

HOW EFFECTIVE IS CBT?

Panic disorder is chronic, often disabling, and characterized by spontaneous, unpredictable panic attacks (*Boxes 1 and 2*³⁻¹¹). When treated with CBT,

about three-quarters of patients become panic-free and maintain treatment gains at follow-up, and one-half become both panic-free and free of excess anxiety.⁹

Typical therapy is 12 individual, once-weekly visits for psychoeducation, relaxation, and breathing training; cognitive restructuring; and exposure therapies.

Briefer protocols, "reduced therapist contact," and group therapy also can help patients and in some studies have been as beneficial as 12 weeks of individual therapy. Although trained psychotherapists have higher success rates than nonbehaviorists when treating panic patients, nonbehaviorists also can provide effective therapy after relatively brief training. 14

American Psychiatric Association¹⁵ treatment guidelines recommend medications—such as selective serotonin reuptake inhibitors (SSRIs),

ced with CBT,

CBT improves panic

symptoms as much

as drug treatments

do for a fraction

of the cost

tricyclic antidepressants (TCAs), and benzodiazepines—as well as CBT as first-line therapies for panic disorder. Other treatment guidelines concur¹⁶ and note that CBT is more cost-effective than medications.

In comparison studies, CBT has been at least as effective for panic symptoms as SSRIs,^{17,18} TCAs,¹⁹ and alprazolam.²⁰ Antidepressants are the preferred drug for panic disorder¹⁶ because they lack benzodiazepines' dependence and abuse potential.

Providing medication during CBT may maintain patients' therapeutic gains better than CBT alone if the medication is continued after CBT is completed. Interestingly, patients who use benzodiazepines during CBT may have higher relapse rates than those who do not use benzodiazepines, particularly when the benzodiazepines are withdrawn.⁹

CBT produces improvement rates similar to those of pharmacologic treatment at one-quarter to one-half the cost in the first year. Patients also appear to have better clinical outcomes if they receive CBT while SSRIs or benzodiazepines are being discontinued, compared with simply stopping the medications.8

CBT CANDIDATES

To diagnose panic disorder, conduct a thorough psychiatric evaluation that includes assessing for comorbid mental and substance use disorders. The history and physical exam are essential to rule out medical causes of the patient's symptoms, such as heart disease causing dizziness or palpitations. Asking patients to keep panic attack records can help you identify panic symptoms' frequency and triggers.⁹

An assessment tool such as the Albany Panic and Phobia Questionnaire (Figure, page 54) can be



a useful starting point. It has 27 items and three subscales to quantify a patient's fear of agoraphobic situations, social phobia situations, and situations that produce bodily sensations (interoceptive symptoms). Items on the interoceptive subscale include activities such as exercising vigorously, ingesting caffeine, and experiencing intense emotion.²¹ Using the Anxiety Sensitivity Index is another assessment option.²²

Not all patients with panic attacks respond well to CBT; predictors of poor response in clinical trials have included:

- severe baseline panic symptoms, personality disorders, and possibly depressed mood
- marital dissatisfaction
- low motivation for treatment.^{2,9}

COGNITIVE THERAPIES FOR PANIC DISORDER

Psychoeducation. Begin by defining and explaining anxiety, panic attacks, panic disorder, and any comorbid psychopathology the patient may have (agoraphobia, depression). Explain panic symptoms as physiologic and psychological responses to stressors.

Address the patient's fears that anxiety's physiologic symptoms represent a serious or undiagnosed medical disorder or that a panic attack could cause serious harm. Assign self-help and reading materials to reinforce this discus-

Box 2

What causes panic disorder? Multiple factors may trigger attacks

BIOLOGICAL THEORIES

Genetics. About 10% of persons who experience panic attacks have first-degree relatives with panic disorder. Twin studies suggest heritability of up to 43%

Neurobiology. Anxiety responses appear to be organized at different neuroanatomic levels:

- automatic responses by periaqueductal grey matter or locus coeruleus
- practiced responses by the amygdala and septohippocampal regions
- cognitively complex responses by higher cortical regions.

The hypothalamus mediates neurohormonal responses. Panic disorder patients' response to SSRIs, tricyclic antidepressants, and benzodiazepines suggest a link with neurotransmitters serotonin, norepinephrine, and GABA. Adenosine, cannabinoids, neuropeptides, hormones, neurotrophins, cytokines, and cellular mediators may also be involved.

Provocation. Panic disorder may have a physiologic mechanism. When exposed in the laboratory to panicogenic substances (such as carbon dioxide, sodium lactate, yohimbine, and caffeine), persons with panic disorders experience greater numbers of panic attacks than do those without panic disorders. These laboratory-induced panic attacks resemble real attacks, and anti-panic medications block the induced panic attacks.

PSYCHOLOGICAL THEORIES

The cognitive-behavioral model postulates that panic disorder patients:

- have a predisposed vulnerability to respond with physiologic arousal to negative stressors
- tend to see anxiety symptoms as harmful
- have negative and catastrophizing cognitions about those symptoms.

With conditioning, patients associate early physiologic arousal with other panic symptoms as the arousal progresses.

Ultimately, they become hypervigilant for symptoms and develop a learned escalation of anxiety and apprehension (with accompanying negative cognitions) when the early symptoms re-occur.

Source: References 3-9



Figure

Patient assessment: Albany Panic and Phobia Questionnaire

Instructions for patients: Please rate, on the following scale, the amount of fear you think you would experience in each of the situations listed below if they were to occur in the next week. Try to imagine yourself actually doing each activity and how you would feel.

Fear Scale 012345678	
No fear Slight fear Moderat	e fear Marked fear Extreme fear
1. Talking to people	15. Wearing striking clothes
2. Going through a car wash	16. Possibility of getting lost
3. Playing vigorous sports on a hot day	17. Drinking a strong cup of coffee
4. Blowing up an airbed quickly	18. Sitting in the center of a cinema
5. Eating in front of others	19. Running up stairs
6. Hiking on a hot day	20. Riding on a subway
7. Getting gas at a dentist	21. Speaking on the telephone
8. Interrupting a meeting	22. Meeting strangers
9. Giving a speech	23. Writing in front of others
10. Exercising vigorously alone	24. Entering a room full of people
11. Going long distances from home alone	25. Staying overnight away from home
12. Introducing yourself to groups	26. Feeling the effects of alcohol
13. Walking alone in isolated areas	27. Going over a long, low bridge
14. Driving on highways	

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sion (see Related resources). Finally, explain the rationale for using CBT to treat panic symptoms.

Use cognitive restructuring to address faulty or irrational information-processing patterns that underlie pathologic anxiety. Identify automatic thought patterns (such as catastrophizing, overgeneralization, all-or-nothing thinking, and personalization), then provide a careful "reality check," in which you systematically substitute a more-rational thought process.

Have the patient keep a self-monitoring diary

to help you assess thought patterns and re-direct irrational thoughts. A diary may identify anxiety-provoking scenarios on which to focus therapy. Encourage patients to document anxiety events using the "triple-column" technique:²³

- column 1: circumstances of the anxiety or panic
- column 2: their emotional state at the time
- column 3: any thoughts they can identify.

Instruct them to log this data while experiencing symptoms or immediately afterward. Later,

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during the intervention phase, patients can record how they tried to restructure their thoughts and any consequent mood changes. Review diary entries with them during subsequent sessions.

EXPOSURE THERAPY

Graduated exposure and response prevention (ERP) is the core component of CBT for panic disorder. ERP exercises require the patient to confront anxiety-producing stimuli while agreeing not to engage in maladaptive behavior that avoids, prematurely reduces, or prevents the anxiety. The stimuli may be external cues—such as bridges, stores,

or heights—or interoceptive cues such as dizziness, tachycardia, or tachypnea.

Creating fear hierarchies. To begin, we recommend that you work with the patient to create lists of all external situations and interoceptive stim-

uli that cause him or her anxiety. Separating the stimuli into two lists helps patients recognize that their bodily stimuli are at least as important as environmental stimuli in promoting a panic attack.

The patient then rates each stimulus using a Subjective Units of Distress scale (SUDS)—assigning 0

to 100 points from no anxiety to overwhelming anxiety—and ranks items on the lists from mildest to worst anxiety. Instruct patients to rate the distress they would feel if they could not escape from the stimuli.

First experience. After the hierarchies are created, the therapist introduces the patient to exposure therapy by choosing an item that causes mild to moderate anxiety. Starting at this anxiety level, patients are likely to succeed with their first exercise without feeling overwhelmed. The therapist teaches the patient about the process, then begins

Box 3

Exposure therapy

anxiety does not

last indefinitely but

diminishes rapidly

teaches patients that

Exposure therapy: Two caveats for therapists

Resist temptation to rescue patients from their anxiety during exposure sessions, such as by chatting about the weather or current events or providing other distractions. To extinguish the link between the stimuli and anxiety, the patient must experience anxiety all the way through the exercise—preferably giving ongoing Subjective Units of Distress (SUDS) ratings—until symptoms inevitably wane and cease.

Similarly, avoid assigning exposure homework to be done "until you can't stand it anymore, then take a rest." Although well-intentioned, allowing the patient to escape the exposure when anxiety peaks increases conditioned anxiety and strongly reinforces avoidance behaviors.

the exposure by helping the patient create and confront the very scenario (or a representation of that scenario) that causes anxiety.

When working on interoceptive cues, various exercises can be used to reproduce bothersome bodily symptoms, such as:

- running up a flight of stairs or running in place to generate tachycardia
- purposefully hyperventilating to produce lightheadedness.
- spinning in place to create dizziness.

The patient agrees not to actively attempt to escape the scenario but to tolerate and perhaps even focus on the anxi-

ety (*Box 3*). Using "safety cues"—such as leaning against a wall or keeping eyes closed—is also forbidden. Patients soon see that the anxiety does not last indefinitely but begins to diminish fairly rapidly.

Reaching the goal. After repeated exposure sessions, anxiety associated with a stimulus begins to extinguish. Having experienced the success of tolerating a previously difficult stimuli and feeling much less anxious, the patient is ready to take on increasingly difficult tasks. The therapist also assigns the patient "homework" to practice exposure exercises already



mastered during sessions. As exposure therapy progresses, the patient takes a larger role in designing and executing sessions. The goal is for the patient to learn to become his or her own behaviorist and to intervene early when panic symptoms begin.

OTHER BEHAVIORAL TECHNIQUES

Imaginal exposure sessions can be created using visualizations of feared stimuli, gradually presented as with in vivo exposure. For example, as you recount a target scenario, ask the patient to imagine a progression of events or bodily cues that have led to panic attacks. The patient supplies SUDS ratings and refrains from imagining an avoidance or maladaptive response. You can tape-record the session for homework and assign the patient to listen to it and participate daily.

Imaginal exposure may help treat phobic avoidance (such as agoraphobic symptoms), but study results have been disappointing in panic symptoms.²⁴ However, this approach may help reluctant patients initiate in vivo exposure therapy. **Relaxation training**—such as progressive muscle relaxation, visual imagery, or autogenic protocols—has shown mixed results in treating panic.^{25,26} Relaxation may help patients cope with panic's physiologic arousal, but it is not suitable as a singular intervention.

Breathing retraining. Because hyperventilation and

For panic attacks, identify faulty automatic thought patterns and provide 'reality checks' to restructure cognition. During behavioral therapy, continue graduated exposure until anxiety diminishes, and resist temptation to 'rescue' the patient. Your goal: teach patients to manage anxiety on their own.

Bottom"

panic symptoms are related, instruction and practice in slow, diaphragmatic breathing has long been a component of CBT for panic symptoms. Little evidence supports breathing retraining,⁹ although Meuret et al^{27,28} have described a respiratory feedback paradigm that may reduce panic symptoms in appropriately selected patients.

Many studies that have assessed breathing retraining as monotherapy for panic have had methodologic flaws.²⁷

BUILDING A THERAPEUTIC ALLIANCE

Successful therapists have been found to use empathic listening more than directives and explanations in the first therapy session. They understand the suffering from panic disorder and the value of listening as patients explain their symptoms, thoughts, and feelings. The rapport built during this initial interaction can help sustain motivation as the therapist then takes charge of subsequent sessions.

Among important skills for CBT therapists, Seligman²⁹ includes empathy, caring, warmth, and active listening, as well as the ability to:

- be a teacher, scientist, and co-investigator
- demystify treatment
- engage clients as "active, knowledgeable, and responsible partners" in their therapy.

Finally, although CBT clinicians suggest tasks and interventions for this "shared endeavor," patients are primarily responsible for change.

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