When to recommend cognitive behavioral therapy

Consider CBT for patients who you suspect have anxiety or trauma-related disorders. The benefits of this short-term, goal-oriented approach are detailed in this review and in the accompanying evidence-based table.

CASE
Darla S, a 42-year-old being treated for gastrointestinal (GI) distress, has undergone multiple tests over the course of the year, including a colonoscopy, an endoscopy, and a food allergy work-up. All had negative results. Medication trials—with proton pump inhibitors, H2 receptor antagonists, and prokinetics, among others—have not brought her any relief. The patient recently began taking sertraline 200 mg/d, which seemed to be helping. But on her latest visit, Ms. S requests a prescription for a sleeping pill. When asked what’s been keeping her up, the patient confides that she recently began having nightmares relating to a sexual assault that occurred several years ago.

If Ms. S were your patient, what would you recommend?

Family physicians (FPs) often encounter patients who are experiencing psychological distress, particularly anxiety.1 This may become evident when you’re treating one problem, such as low back pain or GI distress, but come to realize that anxiety is a key contributing factor or cause. Or you may discover that an anxiety or trauma-related disorder is complicating or interfering with treatment—preventing a patient with heart disease from quitting smoking, exercising regularly, or following a heart-healthy diet, for example.

Psychotropic medication is an option in such cases, of course. But the drugs often have adverse effects or interact with other medications the patient is taking, and their effects typically last only as long as the course of treatment. Being familiar with effective nonpharmacologic treatments—most notably, cognitive behavioral therapy (CBT)—will help you provide such patients with optimal care.

Advantages. CBT has several advantages that supportive counseling, traditional psychotherapy, and other nonpharmacologic treatments for psychological disorders do not: It is time-limited, typically lasting 9 to 12 weeks; skill-based; and
Exposure therapy involves presenting the frightening stimuli to patients in a safe environment so that they can learn a new way of responding.

Meta-analyses demonstrate efficacy and effectiveness

Multiple studies and meta-analyses have consistently found CBT to reduce symptoms associated with anxiety and trauma-related disorders. Foremost among them are a meta-analysis by Hofmann and Smits of randomized placebo-controlled studies that assessed CBT’s efficacy and a meta-analysis by Stewart and Chambless that focused instead on effectiveness studies—ie, those assessing CBT in less-controlled, real-world practice. The findings are highlighted in Table 2.6,7

A 2012 review of meta-analyses of CBT for a broader range of psychological disorders found it to be more effective in treating generalized anxiety disorder (GAD), obsessive compulsive disorder (OCD), panic disorder (PD), posttraumatic stress disorder (PTSD), and social anxiety disorder (SAD) than control conditions, such as placebo, and often more effective than other treatments. Notably, CBT was shown to be more effective than relaxation therapy for PD, more effective in the long term than psychopharmacology for SAD, and more effective than supportive counseling for PTSD.

Cognitive processing and exposure therapy for PTSD

Two types of CBT have been found to be particularly effective in treating PTSD: cognitive processing therapy and exposure therapy. Each has specific protocols, although treatment often has some components of each.9

Cognitive processing therapy, a first-line treatment for PTSD, was initially developed for the treatment of rape victims,10 but has been found to be effective in treating combat-related PTSD, as well.11 It incorporates the core elements of cognitive therapy—identifying false or unhelpful trauma-related thoughts, then evaluating the evidence for and against them so the patient learns to consider whether these problematic thoughts are the result of cognitive bias or error and develop more realistic and/or useful thoughts. Cognitive processing therapy, however, focuses primarily on issues of safety, danger, and trust relating to patients’ views of themselves, others, and the world. Patients are asked to write, and then read, a narrative of the trauma they endured to help them challenge troubling thoughts about it.10

A woman undergoing treatment for PTSD relating to a sexual assault, for example, may initially think, “All men are bad.” Challenging this thought by examining evidence for and against it may help her replace it with the more realistic belief that some—but not all—men are bad.

Exposure therapy, which is also a first-line treatment for PTSD, involves presenting the frightening stimuli to patients in a safe environment so that they can learn a new way of responding.9 If a patient is afraid of a specific location because she was assaulted there, for instance, slowly exposing her to the site while ensuring her safety can help her anxiety diminish. Depending on the circumstances, exposure may be conducted in vivo (tangible stimuli), achieved through mental imagery (of a combat zone where an improvised explosive device detonated, for example), or both.

Prolonged exposure has been shown to be very effective in treating PTSD resulting from a variety of traumatic events. Other aspects of treatment include education about the disorder and breathing retraining to reduce arousal and increase the patient’s ability to relax.15

Generalized anxiety disorder: Worry exposure and relaxation

CBT for GAD has 5 components:

- education about the disorder
Cognitive restructuring is vital, as well. This involves the use of the Socratic means of questioning, asking “Tell me what you mean by ‘horrible,’” for example, and “What about that is of most concern to you?”

Worry exposure occurs by instructing the patient to engage in prolonged worry about one particular topic, rather than jumping from one worrisome subject to another. The single focus reduces the distress that worry causes, thereby decreasing the time spent worrying. As treatment progresses, the patient is taught to set aside a specific time to worry. Worrying outside of the designated “worry time” is not allowed.

Panic disorder: Recognizing what’s behind physical symptoms
Treatment for PD combines education about the disorder, cognitive restructuring, and exposure.

### Relaxation training
Relaxation training is a crucial part of treatment for GAD, perhaps more so than for other anxiety disorders. Cognitive restructuring is vital, as well. This involves the use of the Socratic means of questioning, asking “Tell me what you mean by ‘horrible,’” for example, and “What about that is of most concern to you?”

### Worry exposure
Worry exposure occurs by instructing the patient to engage in prolonged worry about one particular topic, rather than jumping from one worrisome subject to another. The single focus reduces the distress that worry causes, thereby decreasing the time spent worrying. As treatment progresses, the patient is taught to set aside a specific time to worry. Worrying outside of the designated “worry time” is not allowed.

### In vivo exposure
In vivo exposure involves the creation of a “fear hierarchy” of places and activities that the patient avoids due to fear of having a panic attack, then gradually exposing him or her to them.

### Table 1
Does your patient have an anxiety or trauma-related disorder?

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAD</td>
<td>Characterized by excessive worry about a number of situations, lasting for ≥6 months. Additional symptoms include problems controlling the worry and ≥2 accompanying physical symptoms (eg, sleep problems, muscle tension, or fatigue)</td>
</tr>
<tr>
<td>OCD</td>
<td>Having recurrent and persistent obsessive thoughts and/or compulsions that last for a substantial period of time (approximately ≥1 hr/d) or interfere with daily activities or cause marked distress</td>
</tr>
<tr>
<td>PD</td>
<td>Consists of recurrent and unexpected panic attacks, accompanied by concern about additional attacks, worry about the implications of panic attacks, and/or changes in behavior, such as avoidance of certain activities for fear of triggering an attack</td>
</tr>
<tr>
<td>PTSD</td>
<td>Characterized by symptoms related to a traumatic event; may include re-experiencing, arousal/reactivity, avoidance, and negative changes in thoughts or mood. Symptoms must persist ≥30 days after the trauma</td>
</tr>
<tr>
<td>SAD</td>
<td>Marked by a persistent fear of social situations or performance, associated with concern about being humiliated or embarrassed in some way. Patients must report that they either tolerate such situations with extreme distress or avoid them entirely as a way of managing their anxiety</td>
</tr>
</tbody>
</table>

GAD, generalized anxiety disorder; OCD, obsessive compulsive disorder; PD, panic disorder; PTSD, posttraumatic stress disorder; SAD, social anxiety disorder.

Cognitive Behavior Therapy

Exposure and response prevention (ERP) is the primary treatment for OCD. However, this seemingly straightforward behavioral treatment can be very challenging to implement because the compulsion that reduces a patient’s anxiety may be a mental act—silently repeating a number or phrase until the distress is released, for example—and thus unobservable. Treatment consists of first helping the patient recognize his or her recurrent thoughts, behaviors, or mental acts, then identifying triggers for these compulsions. Next, the patient is gradually exposed to these triggers without being allowed to engage in the compulsive response that typically follows. For example, a clinician may have a patient obsessed with germs pick objects out of the trash during a therapy session but not allow hand washing afterwards or repeatedly write or say a number or phrase that normally elicits compulsive behavior but prevent the patient from engaging in it.

Social anxiety disorder: Group therapy

Group therapy, in which the group setting itself becomes a type of exposure, is a very effective treatment for SAD. This can be challenging, however, as patients with this disorder may be less likely to seek treatment if they know they will be put into a group. Individual treatment is another option for patients with SAD, and can be equally effective.

Cognitive restructuring of anxiety-provoking thoughts (e.g., “Everyone will think I’m stupid”) and exposure to social situations and cues that patients with this disorder typically avoid are other key components of treatment. Exposure often occurs outside of the therapy setting. Patients may be instructed to go to a cafeteria and have lunch alone without looking at their phone or reading a book, for instance, or to go to a coffee shop and strike up a conversation with someone of the opposite sex while in line. Exposures within the therapeutic setting may involve associates of the therapist to help create an anxiety-provoking environment—e.g., having a patient give an

### Table 2

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Efficacy* (in RCTs)</th>
<th>Effect size* (95% CI)</th>
<th>P value</th>
<th>Effect size* (95% CI)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of studies</td>
<td>Effect size*</td>
<td></td>
<td>No. of studies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(95% CI)</td>
<td>P value</td>
<td>(95% CI)</td>
<td>P value</td>
</tr>
<tr>
<td>GAD</td>
<td>2</td>
<td>0.51</td>
<td>.03</td>
<td>11</td>
<td>0.92</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.05-0.97)</td>
<td></td>
<td>(0.77-1.07)</td>
<td></td>
</tr>
<tr>
<td>OCD</td>
<td>3</td>
<td>1.37</td>
<td>.001</td>
<td>11</td>
<td>1.32</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.64-2.20)</td>
<td></td>
<td>(1.19-1.45)</td>
<td></td>
</tr>
<tr>
<td>PD/panic attacks†</td>
<td>5</td>
<td>0.35</td>
<td>.03</td>
<td>9</td>
<td>1.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.04-0.67)</td>
<td></td>
<td>(0.77-1.25)</td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td>6</td>
<td>0.62</td>
<td>.001</td>
<td>6</td>
<td>2.59</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.28-0.96)</td>
<td></td>
<td>(2.06-3.13)</td>
<td></td>
</tr>
<tr>
<td>SAD</td>
<td>7</td>
<td>0.62</td>
<td>.001</td>
<td>11</td>
<td>1.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.39-0.86)</td>
<td></td>
<td>(0.79-1.29)</td>
<td></td>
</tr>
</tbody>
</table>

CBT, cognitive behavioral therapy; CI, confidence interval; GAD, generalized anxiety disorder; OCD, obsessive compulsive disorder; PD, panic disorder; PTSD, posttraumatic stress disorder; RCTs, randomized controlled trials; SAD, social anxiety disorder.

* Effect size: <0.5=small; 0.5-0.7=medium; ≥0.8=large.
† Effect size represents data for panic attacks; effect size for PD was not provided.
Research has found that a combined approach (psychotherapy plus medication) can be effective for the treatment of some anxiety disorders, including OCD.

impromptu speech in front of an attractive associate of the opposite sex.

**Where psychopharmacology fits in**
While CBT is clearly a viable alternative to medication, psychopharmacology is sometimes indicated for anxiety or trauma-related disorders, depending on the diagnosis and on whether psychotherapy is ongoing.27 Evidence shows that specific types of drugs are effective for treating some anxiety-related disorders, while other medications may worsen symptoms (eg, selective serotonin reuptake inhibitors have demonstrated effectiveness in the treatment of PD, while benzodiazepines are contraindicated for patients with PTSD).27-29 Other research has found that a combined approach (psychotherapy plus medication) can be effective for the treatment of some anxiety disorders, including OCD.30 Although the combination may initially assist patients in their efforts to manage troublesome symptoms, in some cases it may limit the gains made from CBT.31

Talking to patients about CBT
In discussing treatment options with patients with anxiety or trauma-related disorders (TABLE 3),2-4,10,12-14,32-34 it is important to note that psychotherapy—and particularly CBT—may be more cost-effective and have longer-lasting effects than medication.32-34 Explain that it is a short-term treatment (typically lasting 9 to 12 weeks) but has been found to have long-term results.2-4,6,7 Point out, too, that patients who engage in CBT are likely to learn new skills, some of which may last a lifetime—and do not have to worry about adverse effects or potential drug-drug interactions as they would if they opted for psychopharmacology instead.

Finally, tell patients that you have vetted the practitioners you refer patients to and that you will continue to see them while they undergo treatment to ensure that the CBT is progressing well and following the established protocol.

**CASE** Ms. S’s primary care physician considers prescribing alprazolam, but is concerned because this anti-anxiety medication can be habit-forming. Noting that although the patient is already taking sertraline, her distress related to the trauma appears to be worsening, the doctor suggests Ms. S try CBT. He explains that CBT is time-limited but has been found to have substantial long-lasting benefits for women who, like her, have been victims of sexual assault. The physician also

### TABLE 3
Broaching the subject of CBT2-4,10,12-14,32-34

<table>
<thead>
<tr>
<th>Tell patients how CBT works…</th>
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<tbody>
<tr>
<td>One 60- to 90-minute session per week for 9-12 weeks</td>
</tr>
<tr>
<td>Weekly homework assignments, often using a workbook or handouts</td>
</tr>
<tr>
<td>Focuses on changing problematic thoughts and/or behavior</td>
</tr>
<tr>
<td>Addresses anxiety by repeated exposure to anxiety-producing stimuli, within a safe environment, until the stimuli no longer cause significant distress</td>
</tr>
<tr>
<td>Goal-oriented, with symptom ratings measured frequently</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>and why you recommend it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term therapy typically yields long-term—even lifelong—benefits, alleviating discomfort/anxiety/problematic behaviors associated with specific events and/or relationships</td>
</tr>
<tr>
<td>CBT is a first-line treatment for anxiety and trauma-related disorders</td>
</tr>
<tr>
<td>You have vetted the therapist you are referring the patient to and will remain involved, addressing any concerns or questions the patient has before deciding on CBT and throughout the course of treatment</td>
</tr>
</tbody>
</table>

CBT, cognitive behavioral therapy.
tells Ms. S that CBT follows a specific protocol that typically consists of 9 to 12 weekly sessions; includes homework assignments and often follows a manual; is goal-oriented and measurable; and focuses on changing present behavior, thoughts, and feelings.

When Ms. S agrees to a referral, her physician assures her that he has vetted the practitioner and asks her to come in after 12 weeks of CBT so he can monitor her progress.

**REFERENCE**


**CORRESPONDENCE**

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