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Implementation of an Intensive Treatment Protocol for Adolescents With Panic Disorder and Agoraphobia

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New and innovative ways of implementing cognitive-behavioral therapy (CBT) are required to address the varied needs of youth with anxiety disorders. Brief treatment formats may be useful in assisting teens to return to healthy functioning quickly and can make treatment more accessible for those who may not have local access to providers of CBT. This paper provides information about the implementation of an intensive, 8-day treatment program for panic disorder (with or without agoraphobia) in adolescents. The treatment protocol is described, as are the various areas to consider when implementing an intensive format. Two case examples are provided to detail how the treatment specifically addresses the wide array of symptoms that can present as part of panic disorder with agoraphobia. Within these case descriptions, treatment challenges are highlighted as well as ideas for handling them. Finally, areas for future research are discussed.

Panic disorder, with or without agoraphobia, is regarded as one of the most severe anxiety disorders, with its onset occurring predominantly in adolescence (Barlow, 2002; Kearney & Silverman, 1992). In community samples, approximately 1% to 5% of adolescents report past or current symptoms of panic disorder that meet *DSM* criteria (Warren & Zgourides, 1988; Whitaker et al., 1990). Panic disorder is associated with substantial impairment, including child and family distress, school avoidance, and disrupted peer relations (Albano, Chorpita, & Barlow, 2003). Adolescents with panic disorder frequently avoid participating in developmentally appropriate activities, including school, social activities with peers, and extracurricular activities, due to fears of both panic attacks and the consequences of those attacks. This avoidance of previously enjoyed activities may induce depressive symptoms, which can lead to further withdrawal from activities that are important for adolescent development. Panic disorder can also have a negative impact on adolescents' close relationships, with many parents reporting that their teen's panic disorder is interfering and distressing to the whole family. Numerous studies have found that when left untreated, panic disorder may lead to additional problems later in life, including behavior problems and depression (Biederman et al., 1997; Mattis & Pincus, 2003).

Cognitive-behavioral approaches for adults with panic disorder have been established (see Margraf, Barlow, Clark, & Telch, 1993). One of these approaches, panic control treatment (PCT) focuses on psychoeducation, cognitive restructuring, interoceptive exposure, and in-vivo exposure (Barlow & Craske, 2000). PCT has been shown through multiple controlled clinical trials to reduce anxiety symptoms and the frequency of panic attacks in adults with panic disorder (Barlow, 2002). However, only a few studies to date have examined cognitive behavioral treatments for panic disorder in adolescent populations. One of the first used a multiple baseline design to demonstrate that adult PCT could be developmentally tailored and successfully applied to adolescents in six to nine treatment sessions. Results showed a decrease in panic attacks for all participants in comparison to baseline (Ollendick, 1995). These encouraging results led to the development of an 11-week cognitive behavioral treatment for panic disorder in teens ages 12 to 17, called Panic Control Treatment for Adolescents (PCT-A), and a randomized controlled trial to test its effectiveness (Pincus, Ehrenreich, Whitton, Mattis & Barlow, in preparation). Results of the study showed that treatment was effective in reducing both the frequency and severity of adolescents' panic attacks at posttreatment and follow-up points, as well as reducing the interference and distress associated with the disorder (Hoffman & Mattis, 2000; Micco, Choate-Summers, Ehrenreich, Pincus, & Mattis, 2007; Pincus, Spiegel, Mattis, Micco, & Barlow, 2003).

Although PCT-A was helpful to many teens, some families expressed concern about the length of treatment

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(11 weeks) and reported wanting a briefer treatment to more quickly alleviate their teen's distress and help them return to developmentally important activities. Also, the 11-week PCT-A treatment did not include therapist-assisted exposures; rather, the therapist and teen would plan in session for exposures that the teen would conduct on his/her own. Several teens stated that they thought it would have been helpful to have a therapist accompany them on exposures to give them the "push" they needed to enter previously avoided situations. Based on both this feedback and the distress and impairment associated with the disorder, an intensive intervention, which would entail longer sessions over a briefer period of time and include massed therapist-assisted in-vivo exposures, was deemed a promising and viable treatment option for adolescents with PDA (Pincus et al., 2003). Intensive treatment formats have been successful in treating other disorders, including specific phobias (Öst, Svensson, Hellstrom, & Lindwall, 2001), obsessive-compulsive disorder (Storch et al., 2007), school refusal (Moffitt, Chorpita, & Fernandez, 2003), and social phobia (Heimberg & Barlow, 1991). In addition to providing the time for therapist-assisted exposures and helping adolescents return to developmentally appropriate activities more quickly, an intensive form of PCT-A would allow treatment accessibility to families living in locations with limited availability of appropriate psychological care, as they could travel to a therapist's location for the short duration of the treatment.

Description of the Intervention

Based on the indications that brief, intensive therapy for PDA could be a preferred treatment format for adolescents and their families, our research team developed *A*dolescent *P*anic Control Treatment With In-Vivo Exposures With Family Involvement (APE+fam) or without family involvement (APE). It is important to note that APE+fam is not a family treatment. Therapists are treating the adolescent while engaging the parents or caregivers as coaches. Parenting skills specifically related to anxiety and panic are addressed as part of the treatment; however, this treatment was not designed to address larger family issues.

A randomized controlled trial is currently underway at Boston University's Center for Anxiety and Related Disorders to assess the efficacy and acceptability of APE and APE+fam, compared to a waitlist control group. The study also aims to test the relative advantages of including parents in treatment; families are randomized to treatment either with or without family involvement. The APE and APE+fam treatment protocols utilize empirically supported treatment components that are administered during six office sessions over an 8-day period. Additional weekly telephone check-ins are conducted for 1 month following the treatment week.

In this section, we describe the active treatment components of APE (summarized in Table 1). Please note that while this description conveys a basic summary of the treatment, it is in no way sufficient for implementation of the complete APE protocol. Therapists interested in delivering the treatment should consult the APE manual (Pincus, Ehrenreich, & Mattis, 2008).

Before Treatment Begins

Prior to treatment, a thorough assessment must be conducted to ensure the presence of panic attacks that are not cued by specific environmental stimuli. Because these symptoms are the primary focus of APE, this treatment is unlikely to be helpful to individuals who only experience panic attacks in response to specific situations, such as going to school. In addition, the patient's motivation should be assessed as our experience suggests that teens who are only engaging in the treatment at the behest of

Table 1
Session Contents for Adolescent Panic Control Treatment With In-Vivo Exposures

Session #	Session contents	Session length
1	Rapport Building Psychoeducation (RE: panic, anxiety, treatment rationale) Development of Fear and Avoidance Hierarchy (FAH)	2 hours
2	Psychoeducation (RE: physiological, cognitive, and behavioral aspects of panic disorder) Identifying cognitive distortions Cognitive restructuring	2 hours
3	Conduction of interoceptive exposure exercises Rationale for interoceptive exposure Rationale for in vivo exposure	2 hours
4	Therapist guided in-vivo exposures	6–8 hours
5	Therapist guided in-vivo exposures	6–8 hours
—	Independent in-vivo exposures	4–6 hours each day
6	Review of independent in-vivo exposures Relapse prevention Plan for in-vivo exposures at home	2 hours