In the absence of data, pharmacotherapy with benzodiazepines has become the mainstay of anxiety management in the elderly population. However, the use of benzodiazepines in the elderly has many problems. Elderly persons are more sensitive to anti-anxiety medications and are subject to a variety of increased risks, including cognitive impairment, falls, and respiratory depression. The "discontinuance syndrome," which consists of rebound anxiety, recurrence of original symptoms, and withdrawal, frequently accompanies attempts to taper benzodiazepine use. The consensus is that most patients would be better off on no medication if alternative treatment could control their anxiety. The approach to treating anxiety described in this conference paper includes standard cognitive-behavioral methods, such as: education, relaxation training, cognitive therapy, and exposure to anxiety-provoking situations combined with behavioral skills training. In addition, certain problems that appear to be particularly common in elderly anxiety sufferers require special attention. These are: somatic anxiety, panic symptoms, benzodiazepine withdrawal, and worry behaviors. A case study is presented to illustrate many of the problems confronted when working with this population, with data presented in four diagrams. General strategies for approaching said problems are discussed. (JBJ)
Cognitive-Behavioral Treatment of Late-Life Anxiety Disorders

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Cognitive-Behavioral Treatment of Late-Life Anxiety Disorders

Estimates based on the frequency of benzodiazepine use among individuals age 65 and older suggest that the rate of clinically significant anxiety problems may be as high as 20% among elderly individuals. Yet, the proper methods of treating anxiety in the elderly are still not established. Although there is extensive research documenting the effectiveness of cognitive-behavioral and psychopharmacological treatments of anxiety in the population at large, there have been relatively few attempts to document the effectiveness of these treatments for the elderly.

In the absence of data, pharmacotherapy with benzodiazepines has become the mainstay of anxiety management in the elderly population. However, the use of benzodiazepines in the elderly is fraught with problems. The elderly are more sensitive to antianxiety medications and, accordingly, are subject to a variety of increased risks, including cognitive impairment, falls, and respiratory depression.

In addition, the so-called "discontinuance syndrome" frequently accompanies attempts to taper benzodiazepine use. The discontinuance syndrome consists of rebound anxiety, recurrence of the original symptoms, and withdrawal.2

While the dangers of benzodiazepine use may be exaggerated in some cases, the consensus is that most patients, and especially the elderly, would be better off on no medication if an alternative treatment could control their anxiety.

In the face of these concerns, the Behavioral Medicine Program at Columbia-Presbyterian Medical Center is striving to provide an effective alternative to pharmacotherapy for elderly anxiety patients seen on our service.

Our approach to treating anxiety in the elderly includes standard cognitive-behavioral methods, such as: education, relaxation training, cognitive therapy, and exposure to anxiety-provoking situations combined with behavioral skills training3. In addition, however, we have found it important to address certain problems that appear to be particularly common in elderly anxiety sufferers, and which we believe require special attention. These include:

1. Somatic Anxiety
2. Panic Symptoms
3. Benzodiazepine Withdrawal
4. Worry Behaviors

First, I will present a case study that illustrates many of the problems that we confront in treating elderly anxiety patients, and how they were handled in this one particular case. Next, I will discuss our general strategies for approaching these particular problems in our elderly patients.

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2 Withdrawal manifests as insomnia, agitation, auditory and visual hypersensitivity, irritability, muscle tension, lethargy, depression and, infrequently, confusion, psychosis and seizure.

3 Behavioral skills training includes applied relaxation and/or rehearsal of progressively more complex behaviors in the presence of autonomic arousal.
Case Study

Presenting Problem. The patient was a 67 year-old woman, suffering from a preoccupation with illness that had gradually been building into acute anxiety as she approached retirement (in the next year). She was aware that she was in basically good health, suffering only from mild hypertension. Nevertheless, she had become so wracked with anxiety over what might happen that she found it difficult to function in her work. Her fears led to constant calls to her doctors over minimal symptoms (such as itching), repeated consultation of medical texts, and rigid exercise and eating habits for assuring her good health. Subsequently, the physical symptoms of anxiety themselves became a focus of her fears. Autonomic arousal due to anxiety led to heart palpitations, which in turn fueled her preoccupation with illness, creating a vicious cycle. She had other, more minor anxieties relating to other sources of "danger," such as riding in taxis, the possibility of a gas leak in the apartment, etc. She was also fearful of becoming addicted to Xanax. Her doctor had prescribed 0.5 mg Xanax, to be taken as desired. The patient took it nearly every day, but received minimal relief and was eventually referred to our Behavioral Medicine Program. The initial interview confirmed the diagnosis of Generalized Anxiety Disorder.

Treatment. The treatment began with training in progressive muscle relaxation, which provided some benefit right away. The patient was also instructed to keep daily written records of anxiety events, including her associated thoughts and behavioral response. As with most anxiety patients, the records revealed that her cognitive interpretations of events included two problematic elements: probability overestimation and catastrophic thinking. Her probability overestimation entailed beliefs that minor sensations were almost certain (or at least very likely) to signify a serious illness. Her catastrophic thinking entailed the belief that a significant illness could not be tolerated in any form, would destroy her, etc. The cognitive component of treatment entailed having the patient learn to question these "hypotheses", and practice formulating alternative, more realistic hypotheses for each anxiety event that arose. The therapist also had the patient note how rarely, if ever, her initial, unrealistically negative hypotheses had been confirmed. In conducting these exercises over several weeks, the patient's thinking became more flexible and objective, and her emotional reactions to bodily symptoms and sensations more moderate.

The treatment also included behavioral components. First, the patient was instructed on ways of reducing many of her "worry behaviors" (under the assumption that, like obsessive-compulsive rituals, these provided short-term relief but fueled her anxiety in the long-term). Thus, the patient was given instructions not to take her own pulse or blood pressure anymore, not to consult medical texts, not to monitor bodily sensations, etc. She was also given guidelines for limiting her calls to doctors for reassurance. Over time, the patient was able to resist more and more worry behaviors and the result was a further reduction in her anxiety and preoccupation with illness.

The second behavioral component of the treatment was an exposure procedure. The patient's various "health promotion" behaviors were surveyed and she was instructed each day to engage in at least one "risk behavior" (We defined "risk behaviors" as actions that the patient objectively knew to pose only a trivial or nonexistent risk, but which emotionally was felt to be a significant risk; for example, omitting a physical exercise, eating meat, taking a taxi, leaving windows closed in her apartment, etc.). With time, these exercises reduced the patient's anxiety further.
Finally, interoceptive exposure exercises—that is, exercises entailing exposure to internal sensations—were utilized both to desensitize the patient to sensations of autonomic arousal and to help her manage them more effectively. These exercises also helped the patient cope with minor withdrawal sensations—such as tachycardia—that arose upon her spontaneous reduction of benzodiazepine use. Exposure practice included deliberate hyperventilation and stair climbing in the therapist’s office and at home. A detailed explanation of the physiology of anxiety and withdrawal was provided beforehand.

The treatment also tried to address one of the patient’s more realistic sources of anxiety, specifically, how her much younger husband, who was physically disabled due to a car accident but still healthy, would manage after her death. Due to the anxiety surrounding this topic, the patient had avoided putting her affairs in order, or even determining whether her retirement benefits would suffice to support him after her death. Accordingly, treatment included guiding the patient, in graded fashion, through the practical steps involved in determining how her husband would be provided for.

**Result.** After 10 weeks of treatment the patient felt that her general level of anxiety had been significantly reduced; she also noted that her heart palpitations had vanished. She estimated that her anxiety had been reduced overall by 65% from its original level. By the end of treatment, she had reduced her use of Xanax to about once per week.

This case illustrates aspects of the four common problems that we observe in older anxiety sufferers. Next I will consider the four separate categories in more detail and discuss some specific issues in dealing with them.

1. **Somatic Anxiety**

In our experience, preoccupation over somatic processes and aging is a common feature of anxiety problems in the elderly. In the case study, somatic anxiety was in fact the overriding concern. This case in particular illustrates a common quandary that can arise in treating somatic fears in the elderly, namely striking a balance between the patient’s need to reduce anxiety versus the need to take the appropriate steps to insure health. These two objectives can clash insofar as patients must reduce some of their “worry behaviors,” including health promotion behaviors and calls to doctors, in order to reduce their preoccupation with somatic processes and hence their anxiety. Thus, as with the obsessive-compulsive patient whose hygiene practices must be made to approximate the norm, the clinician must decide what is the appropriate level of health promotion behaviors.

In dealing with the issue of seeking medical care, we generally observe two principles. First, the patient is urged to routinize his or her medical care as much as possible, meaning she has regular scheduled visits for check-ups in appropriate areas. The reason for routinization is to keep the patient’s mental energy as uninvolved in the medical process as possible; doctor visits are determined according to a schedule rather than the patient’s anxiety. Second, for patients whose reassurance calls to the doctor are obviously excessive—usually patients know this, as doctors have told them so repeatedly—appropriate guidelines for calling the doctor are developed. Usually we instruct patients to wait a couple of days before calling the doctor for symptoms that cause only minor discomfort. By observing this rule, patients often find that their initial symptoms, and associated anxiety, diminish with time. With reduced anxiety, patients evaluate the symptoms more objectively and call the doctor on a more rational basis, not out of pure anxiety. By observing these rules, patients become less and less reactive to new symptoms and their general sense of physical vulnerability is reduced.
2. Panic Sensations

In our experience, elderly individuals who are anxious about somatic processes can experience panic-like symptoms. Specifically, autonomic arousal can itself become the focus of their somatic anxiety. This was true in the case described; the patient's preoccupation with illness and infirmity fueled her anxiety; symptoms of autonomic arousal (such as palpitations and breathlessness) in turn fueled her preoccupation with illness, creating a vicious cycle. A detailed explanation of the physiology of anxiety helps to reduce patients' preoccupation with the physical manifestations of autonomic arousal. In addition, patients benefit from repeated, controlled exposures to physical sensations resembling autonomic arousal. These interoceptive exposure exercises desensitize patients to the sensations of autonomic arousal and allow them opportunities to practice cognitive and behavioral coping skills under controlled conditions.

3. Benzodiazepine Withdrawal

Most of our elderly patients with anxiety problems have been prescribed a benzodiazepine, often by their family doctor. In addition, the patients that we encounter--admittedly a selective sample--usually prefer not to be taking these drugs for a variety of reasons. First, the patients may feel the medication does not produce enough symptom relief. Second, the patients may also experience unwanted side-effects. Third, relying on a drug to manage emotional reactions sometimes runs counter to patients' self image.

At the same time, however much a patient may want to discontinue the medication, withdrawal symptoms can create a significant obstacle. In such cases, we have found that cognitive-behavioral methods can help manage withdrawal symptoms, enabling patients to reduce and ultimately discontinue a medication that is not serving its original purpose. Specifically, we have used cognitive-behavioral methods to train patients to manage withdrawal reactions in the way they manage somatic manifestations of autonomic arousal. In so doing, we rely on three main techniques. First, from a cognitive standpoint, we instruct patients to recognize mild withdrawal symptoms and label them appropriately (specifically, as symptoms that are unpleasant but ultimately harmless). Next, we teach patients to apply the same methods--cognitive reappraisal and behavioral coping--that are utilized to manage panic sensations. Finally, we utilize controlled exposures to physical sensations resembling autonomic arousal (and hence, withdrawal) to provide patients with regulated opportunities to practice their cognitive and behavioral skills.

4. Worry Behaviors

Like other patients with generalized anxiety, elderly anxiety patients engage in many "worry behaviors" as a means of coping with their anxiety (for example, a patient constantly looks out the window to make sure her husband is safely on his way home; or she constantly calls her adult children to make sure they are all right). These worry behaviors, like the checking behaviors of obsessive-compulsive patients, can provide transient relief but seem to fuel the anxiety problem in the long run. To remedy this, we instruct patients to resist the worry behavior, despite the strong urge, and to engage in alternative, productive activities that compete successfully for their attention. These alternatives are worked out in detail with the patient. For example, the patient who constantly calls her adult children might be instructed, instead, to call her own friends and discuss topics that have no bearing on her anxiety. By refraining from worry behaviors, patients usually find that the urge to engage in the worry behavior is gradually reduced and their overall anxiety is diminished.
Worry behaviors can be particularly pronounced in the elderly because older individuals have less structure in their lives than the young and, hence, more free time not only to worry but also to act on their worries. For some anxious elderly individuals, worry behaviors are the structure in their lives. Therefore, to treat anxiety successfully in these individuals, the clinician must pay detailed attention to the level of structure and activity in patients' lives and suggest means of gradually introducing more structure.

The elderly's worries are also often fueled by objective concerns, for example, the very real prospect of disability or death in the not-too-distant future. Therefore, in order to "decatastrophize" the prospect of death or disability, not only cognitively but also in reality, we find it important to discuss with the patient and the family the various contingencies that trouble them. Anxiety can be relieved considerably if the issues are faced squarely and practical solutions are devised.

Recently we have been trying to document more systematically the benefits of cognitive-behavior therapy for elderly anxiety patients. To this end, we examined the treatment progress of seven consecutive patients seen recently in our program. Three of the patients were diagnosed with Generalized Anxiety Disorder, one with a dual diagnosis of Generalized Anxiety Disorder and Panic Disorder, two with Panic Disorder, and one with Specific Phobia. The mean age of the patients was 71.0 years ($SD = 4.4$). The mean length of treatment was 12.9 weeks ($SD = 4.7$).

Our experience with these seven individuals suggests that cognitive-behavioral therapy can be effective for late-life anxiety sufferers. At the end of treatment, we asked these patients to estimate how much their symptoms had been reduced relative to their initial, presenting condition. The results are depicted for the three separate categories of anxiety disorder involved (Figure 1) and for all categories combined (Figure 2). (The pretreatment symptom level is designated 100%.)

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$^4$ The dual diagnosis patient provided separate symptom reduction estimates for panic attacks and for generalized anxiety, hence the $n = 8$ data points depicted in the figures.
As the figures illustrate, symptom levels dropped substantially in all patients following cognitive-behavioral treatment. The amount of reported symptom reduction ranged from 50% to 100%, with a mean of 73.9% (SD = 17.4).

The next figure depicts the time course of anxiety reduction for two Generalized Anxiety Disorder patients who completed daily ratings of their anxiety levels throughout treatment using a self-monitoring form. The patients' z-transformed anxiety ratings, averaged over the days between sessions, are shown in Figures 3 and 4.

Both graphs show a progressive decline in anxiety levels over the course of treatment. Taken as a whole, our experience suggests that cognitive-behavioral therapy can be an effective, risk-free alternative to pharmacotherapy. We find that with each treatment success, referring physicians in our medical center become more inclined to favor the cognitive-behavioral alternative.