Problems in Family Practice

The Anxious Patient

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One of the most common disorders encountered in family practice, anxiety can be divided into phobic reactions, panic disorders, obsessive-compulsive disorders, and generalized anxiety, depending on the presenting clinical features. These syndromes can be differentiated from physical illnesses that may have anxiety as part of the symptomatology. With a careful history, depression can be distinguished from anxiety. The treatment of anxiety involves a wide range of procedures including relaxation techniques, systematic desensitization, goal directed psychotherapy, and drug therapy.

Reaching across the entire spectrum of society, anxiety permeates all psychopathology and influences the course and prognosis of medical illness. In the Family Practice Residency Program of Louisiana State University, anxiety was found to be the third most common disorder encountered.[1] In year-long studies at the Medical College of Virginia[2] and the Rochester-Highland Hospital Family Medicine Program,[3] anxiety ranked 15th and 16th, respectively, as the most frequent diagnosis made in general medical practice. At the Maudsley Hospital in London, 11 percent of all outpatients had anxiety related problems.[4]

Patients with anxiety, especially panic anxiety attacks, generally present with physical symptoms to family physicians. Many of these patients are quite resistant to a diagnosis of anxiety. The key to treatment will be careful negotiation between the patient and physician about cause, prognosis, and treatment of the illness.

Clinical Syndromes

The third edition of the *Diagnostic and Statistical Manual of Mental Disorders*[5] divides the anxiety disorders into phobic reactions, panic disorders, obsessive-compulsive disorders, and generalized anxiety.

Phobic Disorders

The cardinal feature of a phobic disorder is the persistent avoidance of an object, activity, or sit-

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Table 1. Organic Disorders Simulating Anxiety Syndromes*

Cardiovascular	**Metabolic and Hormonal**
Ischemic heart disease	Thyrotoxicosis
Valvular heart disease	Pheochromocytoma
Cardiomyopathies	Adrenocortical insufficiency
Myocarditis	Hypokalemia
Arrhythmias	Hypoglycemia
	Hyperparathyroidism
	Myasthenia gravis
Respiratory	**Nutritional**
Emphysema	Thiamine, pyridoxine, or folate deficiency
Occult pulmonary embolism	Iron deficiency anemia
Hamman-Rich syndrome	
Scleroderma	
Cerebral	**Intoxications**
Transient cerebrovascular insufficiency	Caffeine
Psychomotor epilespy	Alcohol
Essential tremor	Sympathomimetics
	Amphetamines

*Adapted with permission from Suzman MM: Propranolol in the treatment of anxiety. Postgraduate Med J 52 (suppl 4): 170, 1976

uation because of irrational fears. The individual realizes that the fear is unreasonable but continues to avoid the particular situation because to do otherwise would lead to incapacitating anxiety.

Panic Disorder

A patient with a panic disorder has a sudden terrifying apprehension accompanied by dysphoria, palpitations, nausea, tremulousness, precordial discomfort, dizziness, and weakness. Many of the physical symptoms result from hyperventilation. Any situation producing fear can cause the patient to overbreathe, but the increased depth and rapidity of respiration may be so slight that the patient fails to recognize that he is overbreathing. Nevertheless, if sufficiently prolonged, the reduction of alveolar air and carbon dioxide tension of the arterial blood leads to a fall in blood bicarbonate and consequently an alteration in the acid-base equilibrium, producing lightheadedness, sensations of impending faint, increased sweating, sensations of air hunger, feelings of pressure in the chest, and palpitations. All of these symptoms cause an increase in the rate of breathing and an exacerbation of the symptoms with tingling in the extremities, tetanic contractions, fainting, and even convulsions.[6]

Physicians often err in diagnosing these patients as having heart disease, diabetes, hypoglycemia, or thyrotoxicosis. The key differential point lies in recognizing that psychological factors precipitate the patient's acute panic attack. Precipitating stress, especially separations or physical losses, seems to provoke panic attacks in many individuals and is an important point to check in history taking. Furthermore, a panic disorder is generally associated with feelings of chronic anxiety between attacks. The patient may complain of vague apprehension or concern about situations that cannot be

Table 2. Differentiating Features Between Generalized Anxiety and Depression

Depression	Anxiety
Dysphoric mood	Motor tension
Loss of interest in usual activities	Autonomic hyperactivity
Early awakening	Emotional lability
Psychomotor agitation or retardation	Apprehensive expectation
Decreased sex drive	Hyperattentiveness
Weight loss	Difficulty falling asleep
Indecisiveness	
Feelings of worthlessness	
Suicidal thoughts	

specifically identified. Restlessness, inability to sleep, and physical complaints are common.

Obsessive-Compulsive Disorder

An individual with obsessive-compulsive disorder has recurrent persistent ideas, thoughts or impulses (obsessions), and behaviors that are carried out despite the wish to resist (compulsions). The individual recognizes the senselessness of the condition but in an attempt to resist the compulsions, anxiety compels him/her to act upon them.

Generalized Anxiety

The cardinal feature of generalized anxiety disorder is persistent unprecipitated anxiety of at least one month's duration without the specific symptoms that characterize phobic disorders, panic disorders, or obsessive-compulsive disorders. Three of the following features must be present[5]:

1. Motor tension characterized by tremulousness, muscular aches, easy fatigability, inability to relax, twitches, or restlessness
2. Autonomic hyperactivity such as sweating, dizziness, palpitations, or upset stomach
3. Apprehensive expectation characterized by rumination or worry
4. Edginess, impatience, distractibility, poor sleep, or irritability

Individuals with generalized anxiety live in a state of worry, apprehension, and uneasiness. These individuals are overconscientious and have difficulty in making decisions, for they fear making mistakes. Once a choice is made there is a tendency to ruminate over whether the choice was right or wrong. Constant worry produces chronic fatigue and the inability to concentrate.

Differential Diagnosis

Anxiety is a symptom found in most psychiatric disorders and many medical conditions. Without the psychic counterparts of fear or apprehension, the autonomic symptoms alone should arouse suspicion of physical illness (Table 1). The most difficult differential is between anxiety and depression. Patients with both of these disorders commonly present with mixed symptomatology. Persistent anxiety with insomnia, loss of pleasure in sexual activities, and fatigue regardless of mood should raise suspicion of a depressive disorder (Table 2). Those patients with mixed symptoms of anxiety and depression merit a trial of tricyclic antidepressants.[7]

Treatment

The treatment of anxiety often involves a wide range of approaches.

Behavioral Therapy

Behavioral therapy focuses on the alteration of maladaptive patterns by modifying the conditions that reinforce the pathological behavior. Behavioral techniques are especially helpful in patients with anxiety syndromes.

Relaxation Techniques

Progressive muscle relaxation[8] can be easily and quickly taught in the physician's office. In a typical situation the patient is instructed on the basic physiology of anxiety. For example: "As the mind becomes anxious the body begins to tense; this body tension produces more anxiety, setting up a vicious cycle. The purpose of progressive muscle relaxation is to reduce the tension in the body, thus helping to break up the vicious cycle." The physician then asks the patient to assume a comfortable position in the chair with his hands and arms resting comfortably in his lap and his feet and legs stretched out in an uncrossed position. Relaxation instructions are then given in a calm, monotonous voice:

"I would like you now just to concentrate on relaxing all the muscles of the body—first we will start with the feet and work up to the head. Let the muscles of the feet relax—the toes—the soles of the feet—the top of the feet—the ankles—just let them relax."

The physician continues with these instructions, gradually helping the patient to relax all the major muscle groups in the body. The entire procedure takes no longer than 20 minutes. The patient is instructed that with daily practice, this technique can be used to control excess tension. The physician can record this technique on an audiocassette and give the recording to the patient to use at home.

After the patient masters progressive muscle relaxation, a ten-second exercise can be learned in which the patient takes a deep breath and relaxes while deeply imagining the tension draining out of the body.[9] The ten-second exercise performed every half hour or so throughout the day can help break up the spiraling tension that accumulates during a stressful workday.

Systematic Desensitization

With systematic desensitization the patient is exposed to situations similar to those inducing an abnormal behavior pattern but in low degrees of intensity so that anxiety is diminished. Gradually the patient is exposed to situations increasingly closer to the situation the patient finds most threatening.

Systematic desensitization can be employed effectively in treating patients with hyperventilation syndrome.[10] Initially, the physician explains to the patient what has produced the symptoms. For example: "When you are placed in a situation that causes you to worry or to think about your troubles, you begin to become slightly tense. Almost imperceptibly you begin to breathe a little faster. Paradoxically, this rapid breathing causes you to begin to feel as if you don't have enough oxygen, when you really have too much. This thought only increases your rapid breathing. Soon you begin to blow off so much carbon dioxide that the acid-base balance in your bloodstream changes and you begin to experience many of the symptoms you have already described to me; namely, you begin to sweat, your pulse gets rapid, you experience a tightness in the chest, you get dizzy, and you may even pass out."

As the physician explains the situation in a calm, soothing voice the patient begins to relax. Progressive muscular relaxation described above will allow the patient to relax more deeply. After the patient has reached a calm state of mind and body, the physician then instructs the patient to hyperventilate by taking several deep breaths in rapid succession. The patient thus reproduces his own symptoms, but this time they are occurring in the physician's office while the patient is in a relatively relaxed state. Next the patient is instructed how to control the symptoms by breathing slowly in and out of the nose with the mouth tightly closed. After a few practice sessions the patient becomes accustomed to the symptoms of hyperventilation and what to do about them, so that they are not as frightening when they occur in a stressful situation. Going through this procedure with

the patient will take no longer than 20 minutes, and although it is usually necessary to have two or three follow-up visits to help the patient practice the technique, the results are rewarding and worth the effort.

Goal Directed Psychotherapy

Patients with anxiety disorders and emotional difficulties related to environmental stresses often respond to 20-minute psychotherapy sessions first described by Castelnuovo-Tedesco.[11] Treatment is limited to ten sessions with the goals of therapy clearly and specifically designated: to help the patient deal with current life situations that are troubling him. Two questions are posed for the patient:

1. What am I troubled about?
2. What can I do to alter the situation to make the situation more tolerable?

The physician develops a direct, sincere, and non-judgmental attitude, and encourages the patient to talk freely about what is bothering him.

Using this method, environmental triggers can often be identified and the patient can learn better methods of coping. A patient who becomes anxious when maladaptive behavior gets him into trouble can be helped by understanding the cause of the behavior and by making plans to alter the response the next time the occasion presents itself.

Drug Therapy

In prescribing anti-anxiety medications the physician should be mindful that moderate levels of anxiety stimulate adaptive functions that are necessary to cope successfully with problems. Care should be taken that these adaptive forces are unhindered by medications. The patient should be told that the use of medication should be necessary for only a brief period of time. Side effects should be honestly discussed.

Benzodiazepines

The benzodiazepines are the most frequently prescribed medications. In the United States approximately 100 million prescriptions per year have been written for diazepam (Valium) or chlordiazepoxide (Librium) at a cost approaching $500 million.[12]

Because of the extremely long half-life of chlordiazepoxide, diazepam, and clorazepate (Tranxene), the medication need not be given any more often than once or twice daily. Oxazepam (Serax) can be given three times daily because of its shorter period of activation. Drowsiness is the most common side effect reported, with postural hypotension, lightheadedness, mental confusion, and ataxia also rather frequently found.[13]

Although the benzodiazepines have a low abuse potential, physical dependence can occur with high doses over long periods of time. Psychological dependence and habituation is a growing problem with these drugs and can reduce a person's zest and enthusiasm for life as well as interfere with the normal coping mechanisms of stress. In addition, long-term use of the benzodiazepines may be associated with increased irritability, hostility, and aggressiveness.[12]

Propranolol

Propranolol (Inderal) is a beta adrenergic blocking agent that can be used to control the somatic symptoms of anxiety. Suzman[14] studied 725 patients presenting with complaints of anxiety that were predominantly somatic in nature including muscular weakness, fatigue, tremor, palpitations, headache, and hyperventilation syndrome. Therapy was initiated with 40 to 80 mg daily in four divided doses and the dosage was gradually increased to control the symptoms. Generally 80 to 320 mg sufficed to control the somatic symptoms of anxiety. In addition, nervousness, irritability, and agitation were also improved. Propranolol appears to be more specifically effective against the physical manifestations of anxiety in comparison with other anxiolytic drugs.[15] Nevertheless, the Food and Drug Administration has yet to approve propranolol for the treatment of anxiety.

Contraindications to propranolol are asthma, chronic obstructive pulmonary disease, allergic rhinitis, heart block, and congestive heart failure. Depression is a common psychiatric complication of propranolol treatment; in one study of hypertensive patients receiving propranolol, 30 percent of the patients had depressive symptomatology.[16]

Tricyclic Antidepressants

Several recent studies[7,17] have reviewed the treatment of phobic and panic disorders comparing the tricyclic antidepressant, imipramine, with placebo and behavioral therapy. Imipramine is significantly more effective. Imipramine can be started with 25 mg before bedtime and increased by 25 mg every second night until panic attacks cease or a total of 150 mg daily is reached. If panic attacks continue, further increments to a maximum of 300 mg can be prescribed. Dosage should be adjusted if side effects occur. The patient can be maintained on the lowest possible dose.

Other Medications

Because of their high abuse potential, the barbiturates and the propanediols (meprobamate-like drugs) have no place in modern drug treatment of the anxiety disorders. The risk of tardive dyskinesia renders the antipsychotics inappropriate for the treatment of anxiety.

Combination Therapy

Practical psychotherapy demands that the busy family physician use a combination of supportive, uncovering, behavioral, and drug therapy. Initially the physician may elect to use explanations to help the patient understand the basic physiology of anxiety and the causes of tension states. These explanations, of course, need to be geared to the education level and the sophistication of the patient. Once or twice weekly, 20-minute sessions could be arranged with the goal of helping the patient learn to handle tension more effectively. If the patient is acutely anxious, drug therapy may be indicated for a few weeks to calm the patient enough to be able to work psychotherapeutically. The patient should be informed that drugs are being used only for one to two weeks as an adjunct to other therapy. The physician may wish to train some patients in relaxation techniques; generally two or three sessions suffice. The patient can be encouraged to experiment with new ways of approaching old problems. When the patient slips back into maladaptive patterns of handling anxiety, the physician can optimistically suggest that conditions generally improve with practice. As treatment progresses the relationship of past experiences and environmental situations can be clarified and interpreted.

Psychiatric Referral

Indications for psychiatric referral[18] include: (1) failure to respond to treatment after a three-month period; (2) inability to identify the source of the patient's anxiety; (3) management difficulties because of the patient's personality; and (4) more intensive psychotherapy requested by patient.

References

1. Kirchner F, Stewart LC, Shallett J: Identification and management of the anxious patient within a model family practice unit. J Fam Pract 6:533, 1978
2. Marsland DW, Wood M, Mayo F: Data bank for patient care, curriculum, and research in family practice: 526,196 patient problems. J Fam Pract 3:25, 1976
3. Froom J, Culpepper L, Boisseau V: An integrated medical record and data system for primary care: Part 3: The diagnostic index: Manual and computer methods and applications. J Fam Pract 5:113, 1977
4. Hare EH: Triennial Statistical Report. London, Bethlem Royal and the Maudsley Hospital, 1968
5. American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders, ed 3. Washington, DC, American Psychiatric Association, 1980
6. Kolb LC: Modern Clinical Psychiatry. Philadelphia, WB Saunders, 1977
7. Sheehen DV, Ballenger J, Jacobson G: Treatment of endogenous anxiety with phobic, hysterical, and hypochondriacal symptoms. Arch Gen Psychiatry 37(1):51, 1980
8. Bernstein DA, Borkovec TC: Progressive Relaxation Training: A Manual for the Helping Professions. Champaign, Ill, Research Press, 1973
9. Shipley RH, Boudewyns PA: How to overcome phobias: Self-control techniques. Behav Med 6(1):14, 1979
10. Walker HE: How to manage the hyperventilation syndrome. Behav Med 5(6):30, 1978
11. Castelnuovo-Tedesco P: The Twenty-Minute Hour. Boston, Little, Brown, 1965
12. Baldessarini R: Chemotherapy in Psychiatry. Cambridge, Mass, Harvard University Press, 1977
13. Tinkleberg JF: Antianxiety medication and the treatment of anxiety. In Barchas J, Berger P, Ciaranello R, et al (eds): Psychopharmacology: From Theory to Practice. New York, Oxford University Press, 1977
14. Suzman MM: Propranolol in the treatment of anxiety. Postgrad Med J 52(suppl 4):168, 1976
15. Jefferson JW: Use of beta-adrenoceptor blocking drugs in psychiatry. In Saxena PR, Forsyth RP et al (eds): Beta-adrenoceptor Blocking Agents. New York, American Elsevier, 1976
16. Waal HJ: Propranolol-induced depression. Br Med J 2:50, 1977
17. Zitrin CM, Klein DF, Woerner MG: Behavioral therapy, supportive psychotherapy, imipramine, and phobias. Arch Gen Psychiatry 35(3):307, 1978
18. Scaramella T: Management of depression and anxiety in primary care. Pri Care 4(1):67, 1977