Stress, Fears, and Phobias: The Impact of Anxiety

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Case Presentation: How often in the oncology setting do patients express fear, worry, or concern about the cancer experience? A 41-year-old woman with a diagnosis of stage I ductal carcinoma treated with lumpectomy, radiation therapy, chemotherapy, and hormonal manipulation had no evidence of disease four years later. The patient had trouble sleeping at night and felt nervous most of the time. She expressed that her feelings have been worse since her cancer diagnosis.

A 50-year-old man with stage III colon cancer completed adjuvant chemotherapy three months ago. For six weeks prior to his routine follow-up appointment, he was unable to eat, felt fidgety, had difficulty sleeping, and was irritable with his family. On the day of his appointment, he felt nauseated, was short of breath, and had a rapid heartbeat. He stated that his thoughts for the past six weeks constantly centered on being told that the cancer was back.

A 46-year-old man was undergoing neoadjuvant chemotherapy for colorectal cancer. On scheduled treatment dates, he would experience nausea and vomiting prior to arrival at the office. When IV access was obtained, he would become cold, pale, and diaphoretic. Despite interventions, the symptoms worsened with each treatment. He started to arrive late for appointments, cancel treatments, and subsequently stopped therapy to avoid the symptoms that occurred on the day of scheduled treatment.

The common denominator for these patients is anxiety. Anxiety and anxiety disorders are frequent occurrences that can be debilitating for patients with or without cancer diagnoses. This article will review the most common types of anxiety disorders that may be seen in patients with cancer.

Definition and Incidence

Anxiety as a response to a cancer diagnosis and treatment often is underrecognized and undertreated (Bottomley, 1998). Anxiety is described as a vague, general feeling of concern or worry. The incidence of anxiety in recently diagnosed patients with cancer may be as high as 50%. The estimated rate of chronic anxiety present in long-term cancer survivors is approximately 30%. Events that may trigger anxiety in patients with cancer include hearing the diagnosis, receiving chemotherapy, having surgery, undergoing radiation therapy, and discussing issues with family.

Generalized Anxiety Disorder

Generalized anxiety disorder (GAD) is an uncontrolled worry, fear, or excessive apprehension about events or activities (Antai-Otong, 2003; Bottomley, 1998; Shear, 2003). GAD affects women more often than men. Approximately 4 million people in the United States have GAD. The disorder may manifest during childhood or adolescence.

Panic Disorder With or Without Agoraphobia

Panic disorder is described as an intense fear that occurs suddenly and without warning. Attacks are unpredictable. Patients with panic disorders may have agoraphobia, an uncontrollable fear of a place or situation with subsequent avoidance of the evoking situations associated with the attacks (Antai-Otong, 2003; Bottomley, 1998; Shear, 2003).

On average, 3.6% of American adults report panic disorders, with 8%–13% seen in the primary care setting (Bottomley, 1998; Simon & Korbly, 2002). Women are affected twice as often than men. The disorder is commonly seen in patients aged 25–44 years. Phobias that oncology health-care workers need to consider include fear of doctors, illness, injury, and death (Bottomley). Other fears that impact the care of patients with cancer are those of needles, medication, or anesthesia.

Social Anxiety Disorder

Patients with social anxiety disorder (SAD) have an inappropriate, persistent
fear of social or performance circumstances (Gross et al., 2005). These individuals are afraid that their actions will produce embarrassment or humiliation in specific situations. The situations may be generalized or nongeneralized. Generalized situations involve public performance or social contact. Nongeneralized situations comprise a specific or limited few circumstances that incite an attack. Most SAD sufferers have the generalized form.

SAD generally develops during the teenage years and is a lifelong disorder. The prevalence of SAD in the United States is estimated to be from 1%–4%. According to a study conducted by Gross et al. (2005), substance abuse was more prevalent in those with SAD than those with other anxiety disorders (Gross et al.).

**Post-Traumatic Stress Disorder**

Post-traumatic stress disorder (PTSD) occurs following a traumatic event that results in persistent, unpleasant memories. Events that may trigger PTSD involve a life-threatening incident such as war, acts of terrorism, natural disasters, assault, or abuse (Antai-Otong, 2003). PTSD has been diagnosed in more than five million people in the United States. For patients with cancer, the diagnosis or treatment of cancer may initiate PTSD (Shear, 2003).

**Signs and Symptoms**

**Generalized Anxiety Disorder**

For a diagnosis of GAD, patients must exhibit three of the following six symptoms on most days for six months or longer: fatigue, insomnia, restlessness or inability to relax, irritability, muscular tension, or difficulty concentrating (Dains, Baumann, & Scheibel, 2003).

**Panic Disorder With or Without Agoraphobia**

Patients with panic disorders will have a rapid progression of symptoms that last 20 minutes to hours. Most panic attacks resolve in 10–20 minutes. Common complaints include sweating, dyspnea, chills, diaphoresis, tachycardia, chest pain, numbness or tingling, nausea, tremors, or a fear of dying (Antai-Otong, 2003; Bottomley, 1998). Panic disorders often are connected with major depression. Practitioners need to assess for depression as a comorbid condition.

When differentiating between anxiety disorders, those with GAD will feel tense and restless, have insomnia, and report muscle aches or headaches, whereas those with panic disorders will report dyspnea, palpitations, numbness, and chest pain (Bottomley, 1998).

**Social Anxiety Disorder**

Sufferers of SAD will exhibit flushing, palpitations, tremors, and sweating when confronted with an attack-provoking situation (Simon & Korbly, 2002). Typical situations include public speaking, parties, social gatherings, or meeting new people. Because patients with cancer may have an altered body image, social situations may be avoided for that reason and not because of SAD. Major depression is concomitant in more than two-thirds of individuals with SAD. When SAD is suspected, healthcare providers should automatically screen for depression.

**Post-Traumatic Stress Disorder**

Symptoms of PTSD involve (a) reexperiencing the event in the form of a flashback, (b) avoiding people, places, or items associated with the event, and (c) hyperarousal (Antai-Otong, 2003; Shear, 2003). Common complaints include irritability, headache, dizziness, insomnia, trouble concentrating, and exaggerated reactions to certain situations.

**Pathophysiology**

The exact mechanism of action for anxiety disorders is not known (Schmucker, 2003). Triggers for anxiety attacks may come from the environment or physical conditions. Theories about the cause of anxiety include a learned response, oversensitivity, or unconscious stimulus. However, recent reports have demonstrated that an imbalance of biochemical neurotransmitters may have a part in the process. In patients experiencing anxiety, elevated levels of serotonin or norepinephrine may result from impaired reuptake, obstruction, or excess production. Regardless of the underlying cause for anxiety, treatment is directed at correcting chemical imbalances.

**Assessment**

Patients with anxiety present with vague somatic complaints. Although a thorough history and physical examination is imperative to discern any physical causes for the complaints, anxiety may be an overlooked cause (Pontillo, Lang, & Stein, 2002). During an office visit, patients may not readily admit to anxiety. Therefore, screening questions such as, “What have you been concerned about?” or “Have you had a hard time getting certain thoughts off your mind?,” may elicit patterns of anxiety.

When anxiety is suspected, healthcare providers should screen for substance abuse, depression, and suicidal risk (Antai-Otong, 2003). Clinicians should review family history for anxiety or mental health disorders as well as for medication, over-the-counter supplement, alcohol, tobacco, or caffeine use that may intensify the symptoms of anxiety. Although symptoms of anxiety generally are present for six months or longer, healthcare providers should verify that an underlying physical problem is not causing the symptoms.

**Differential Diagnosis**

Anxiety has been associated with physical causes and medications (Bottomley, 1998). Physical and medication-associated reasons for anxiety include
- Infection
- Brain metastasis
- Hypoxia
- Hypoglycemia
- Pulmonary embolism
- Hyperthyroidism
- Alcohol or drug withdrawal
- Use of steroids
- Use of certain antiemetic agents.

**Diagnostic Tests**

Diagnostic tests are used to differentiate what has been found through patient histories and physical examinations (Schmucker, 2003). Some tests that may be indicated include electrocardiogram, complete metabolic panel, complete blood count, and thyroid studies.

**Treatment Options**

Anxiety disorders are treated with medications, psychotherapy, or a combination of both. Treatment depends on the
severity of the condition and patients’ acceptance of treatment options (Bottomley, 1998).

Pharmacologic

Medication use in anxiety is targeted toward correcting chemical imbalances. Antidepressants are the core for treating anxiety disorders (Shear, 2003). The first line of therapy is the use of serotonin-selective reuptake inhibitors (SSRIs). SSRIs may take as long as three to five weeks to reach full effect (Schmucker, 2003; Shear, 2003; Simon & Korbly, 2002; Starcevic, 2006). Should patients have severe side effects or fail to achieve adequate response, the recommendation is to switch them to another SSRI agent (Shear). SSRIs are less likely to cause oversedation or cognitive side effects, especially in older adults (Pontillo et al., 2002). Initial use of SSRIs should last at least 12 months because SSRIs will not cure anxiety, only control symptoms (Shear). Once the medication is discontinued, symptoms are likely to recur.

Second-line antidepressant drugs recommended for anxiety are selective norepinephrine reuptake inhibitors (SNRIs) or tricyclic antidepressants (TCAs) (Potillo et al., 2002; Schmucker, 2003; Shear, 2003; Starcevic, 2006). SNRIs will reduce the symptoms of anxiety, especially those associated with SAD (Starcevic). TCAs are useful for patients with panic disorders. Use of TCAs should be monitored, particularly in older adults, because of the potential for lethal overdose (Pontillo et al.; Simon & Korbly, 2002).

Benzodiazepines are used to reduce the symptoms of anxiety (Bottomley, 1998). They are best used in conjunction with antidepressants. Because of the potential for abuse, use should be restricted to 10–14 days (Simon & Korbly, 2002). Side effects include oversedation and withdrawal symptoms.

An alternative antianxiety, nonbenzodiazepine agent is buspirone (Bottomley 1998; Simon & Korbly, 2002). Because it lacks addictive effect, buspirone has a clinical benefit in managing anxiety. Buspirone is effective in treating GAD. In patients with SAD or panic disorders, the use of buspirone alone will not provide the most advantageous symptom control.

Several other classifications of drugs have demonstrated benefit with anxiety disorders, including beta blockers, anticonvulsants, and a novel agent called pregabalin. Beta blockers are used to reduce the autonomic response seen with anxiety (Simon & Korbly, 2002). The drugs can be used alone to treat performance anxiety or in conjunction with antidepressants for panic disorders or GAD (Antai-Otong, 2003; Shear, 2003). Anticonvulsants are useful when patients have generalized SAD, hallucinations, or delusions (Bottomley, 1998; Starcevic, 2006). Pregabalin decreases cellular calcium flow, affecting neurotransmitter release to control anxiety seen with GAD and SAD (Starcevic).

No matter which pharmacologic agents are used, nonpharmacologic therapy also can improve patient outcomes.

Nonpharmacologic

Cognitive-behavioral therapy (CBT) is the mainstay nonpharmacologic treatment for anxiety disorders. Control of long-term symptoms is 50%–75% greater with the use of CBT than with medication alone (Shear, 2003). CBT is psychological therapy that is used to restructure or reframe patient thinking. Patients are taught how to replace the fearful thoughts that cause anxiety (Simon & Korbly, 2002). For instance, having patients repeat an affirming statement, such as “I chose to live in trust rather than in fear,” is effective at interrupting the anxiety process. Other nonpharmacologic interventions include relaxation techniques, biofeedback, and routine exercise to control anxiety (Schmucker, 2003).

Patient Education

- Educate patients about the disorder.
- Review potential side effects of medications.
- Promote self-management activities such as relaxation techniques and deep-breathing exercises.
- Identify what the effects of alcohol, tobacco, caffeine, and other stimulants have on symptoms of anxiety (Antai-Otong, 2003; Rollman, Belnap, Reynolds, Schulberg, & Shear, 2003).
- Provide patients with support group information or other self-help resources.

Internet and National Resources

- National Institute of Mental Health (800-64-PANIC)
- American Psychological Association (www.apa.org)
- American Psychological Association Help Center (http://apahelpcenter.org)
- Anxiety Disorders of America (www.adaa.org)
- American Cancer Society: Coping With Physical and Emotional Changes (www.cancer.org/docroot/MBC/MBC_0.asp)

Recommendations for Follow-Up

- Routine follow-up is recommended to monitor medication effectiveness and side effects.
- Immediate psychiatric evaluation is required for patients with suicidal ideations.
- Refer patients to mental health specialists for inadequate response to therapy (Rollman et al., 2003).

Conclusion

Anxiety disorders are the most frequent mental health problem seen in primary care. In the oncology setting, anxiety may not be properly addressed. Advance practice nurses can have an impact on patients’ quality of life through recognition and treatment. Patients may be more open to discussing anxiety and the issues surrounding the disorder with advanced practice nurses, who are in a unique position to contribute to the improvement of patients’ oncology experience.

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References


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