

# Focus

## Treating anxiety - with a focus on panic disorder

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Anxiety disorders are commonly encountered in general practice. It is not unusual for patients who present often with multiple physical complaints or serious or chronic medical conditions to be anxious. The GP may view anxiety symptoms as simply a reaction to the medical condition. However, a primary anxiety condition can be present, complicating the existing medical condition.

Another group of patients are those who have a primary anxiety disorder that presents as physical distress in the absence of any "organic" basis.

Anxiety is generally defined as a feeling of unease or dread in response to an internal stimulus. This is in contrast to fear, which is based on an external threat. However, as will be discussed later, anxiety and fear can manifest in various forms.

Feeling anxious in the medical setting occurs because of unease with doctors, fear of being diagnosed with a serious condition, and abhorrence to medical procedures and treatments. Therefore it is easy to assume that anxiety symptoms are a natural response to illness or to the clinic visit.

The distinction between normal versus pathological anxiety is a skill GPs should develop.

### Key points

- Anxiety is a feeling of unease or dread in response to an internal stimulus, in contrast to fear, which is based on an external threat
- Anxiety disorders include specific phobias, post-traumatic stress disorder, obsessive-compulsive disorder, substance induced anxiety disorder and anxiety disorder secondary to a primary medical condition
- Panic disorder is an anxiety condition which often presents as physical complaints. Consider it when the clinical picture is confusing and the workup is negative
- Though the course of panic disorder is often chronic, excellent treatment options are available. Cognitive behavioural therapy and pharmacotherapy are highly efficacious

### ANXIETY

## Manifestations

Anxiety can manifest in different forms – physical, emotional, behavioural and cognitive.

**Physical** symptoms involve the autonomic nervous system in the form of tachycardia, tachypnoea, sweating, dizziness and clamminess.

**Emotionally**, an anxious person experiences feelings of dread, being "on edge", "nervousness", panic and terror.

**Behaviourally**, a person can present with actions or compulsions that attempt to lessen the unease. This can be seen as fidgeting, restless leg movements, pacing, hand-wringing and even compulsive behaviour like hand-washing and excessive checking.

**Cognitively**, an anxious person will be worrying, thinking of the worst scenarios, having obsessive thoughts and even catastrophic beliefs.

When do we consider that anxiety is pathological? Four criteria can help distinguish pathological from normal anxiety:

1. autonomy – anxiety symptoms are minimally or not at all related to an external cause
2. intensity – high level of discomfort and severity of symptoms
3. duration – persistence of symptoms over time
4. behaviour – development of disabling behavioural strategies, (eg, avoidance or compulsive behaviours, frequent GP visits).<sup>1</sup>

Knowing these four parameters will assist GPs not just in identifying pathological anxiety but also in pinpointing the specific anxiety disorder.

## Epidemiology

In the general population, about one quarter will experience pathologic anxiety over the course of their lifetime.<sup>2</sup> In primary care, anxiety is quite prevalent, affecting 14 to 66 per cent of patients<sup>3</sup> and up to 20 per cent of patients in a primary care practice are prescribed benzodiazepines in a six-month period.<sup>4</sup>

## Pathophysiology

The pathophysiology of anxiety is currently understood to be a dysregulation of several neurobiological substrates. Overstimulation of the central noradren-ergic system, in particular the locus coeruleus, will simulate a panic attack. Medications that block locus coeruleus activity (ie, antidepressants, benzo-diazepines) reduce anxiety symptoms. The gamma-aminobutyric system (GABA) as well as the serotonergic system are both implicated in anxiety, as evidenced by the anxiolysis caused by modulators of these two neurotransmitter

systems.

## Types of anxiety disorder

There are several variations of pathologic anxiety. These include specific phobias (eg, excessive fear of needles), post-traumatic stress disorder, obsessive-compulsive disorder, substance induced anxiety disorder and anxiety disorder secondary to a primary medical condition (eg, hyperthyroidism). This article focuses on panic disorder.

## PANIC DISORDER

### Symptoms

Panic disorder is a syndrome characterised by recurrent panic attacks. These are discrete periods of intense and catastrophic anxiety associated with at least four other symptoms of autonomic arousal and anxiety that develop rapidly and typically peak within 10 minutes.<sup>5</sup> The first attack is usually spontaneous, while succeeding attacks can either be spontaneous or in response to the fear of having another attack (anticipatory anxiety).

Physical symptoms can be cardiac (chest pain, tachycardia), respiratory (shortness of breath), gastrointestinal (nausea, abdominal distress) and neurologic (dizziness, light-headedness, paresthesias). In addition, there can be psychological symptoms of derealisation (feeling that the world is not real) and depersonalisation (feeling detached from oneself). Attacks can be so catastrophic that patients think they are dying or going crazy.

Because of the spontaneous and severe physical symptoms, most panic patients end up in emergency rooms or GP clinics. But once they are seen their symptoms dissipate, leaving the patient perplexed and the clinician confused.

In a Canadian study of emergency room visits, about 25 per cent of patients who presented with chest pains fulfilled the criteria for panic disorder.<sup>6</sup> Between 40 and 60 per cent of patients with atypical chest pain and normal cardiac catheterisation results may have a panic disorder.<sup>7</sup>

The incidence of panic disorder is also high among patients with primary complaints of dizziness (up to 20 per cent), irritable bowel syndrome (as much as 40 per cent) and COPD.<sup>1</sup> It is not unusual for patients with panic disorder to make several visits to surgeries and end up with multiple, repeated and expensive diagnostic workups before an anxiety condition is suspected.

A significant proportion of patients with panic disorder develop agoraphobia – a fear of being in a situation or place where escape is perceived to be difficult. This can further restrict the patient in terms of psychosocial functioning and daily activities. With severe panic and agoraphobia, patients can become housebound. In terms of suicide risk, the incidence of suicidal ideations and attempts is surprisingly high for panic disorder patients – between 17 and 42 per cent.<sup>8-10</sup>

### Epidemiology and course

The age of onset of panic is usually in the 20s and 30s, though some present in their teens. In the elderly, the diagnosis of panic is rare. Women are affected more than men at a ratio of 2.5:1 and lifetime prevalence is about 3.5 per cent.<sup>2</sup> The course is often chronic with relapse rates often high with discontinuation of treatment.

## Treatment

If untreated, panic disorder can result in significant social and occupational dysfunction. Treatment is helpful and of two general types – psychotherapy and medication.

### 1. Psychotherapy

Cognitive behavioural therapy (CBT) is a specific type of psychological intervention that involves understanding and modifying one's thought patterns, behaviours and emotions. It is predicated on the belief that erroneous thought patterns, maladaptive behaviours and overreaction to stress promote disproportionate anxiety and panic.

CBT involves active dialogue with a trained cognitive therapist, exercises and homework. In panic disorder, CBT is designed to short-circuit the panic reaction, correct the maladaptive thoughts that increase anxiety responses, promote breathing training and muscle relaxation. A key component of CBT which a GP can easily do is education on what panic disorder is.

The data on the efficacy of CBT in panic are excellent. CBT is free of side effects as well as giving control to the patient.

### 2. Medication

The mainstays of pharmacological management of panic disorder are antidepressants and benzodiazepines.

#### Antidepressants

Different classes of antidepressants are proven to be effective in panic disorder. The different families of antidepressants available in New Zealand include SSRIs (fluoxetine, paroxetine and citalopram), tricyclics (imipramine, nortriptyline, desipramine and amitriptyline) and MAOIs (tranylcypromine and phenelzine).

#### SSRIs

SSRIs are the current first line antidepressant treatment because of several factors – (1) better tolerability profile (2) safety in overdose (3) broad spectrum efficacy for anxiety and depressive conditions and (4) lower potential for physical dependence (compared to benzodiazepines).<sup>1</sup>

Dosing is usually slower for anxious patients as they appear more sensitive to side effects. It is not unusual for anxious patients to have more anxiety during the titration of SSRIs.

Dosing can be as low as 10mg of fluoxetine, paroxetine or citalopram. After a week, if the patient tolerates the medication, the dose can be gradually increased to therapeutic levels (fluoxetine 20-80 mg/day, paroxetine 20-60 mg/day and citalopram 20-60 mg/day). Generally, SSRIs are taken in the morning to avoid SSRI induced sleep changes and with breakfast to avoid the mild GI side effects.

### Tricyclics and MAOIs

Second line antidepressant agents include the tricyclics and MAOIs. Though both classes of medications are effective in panic disorder as well as other anxiety conditions, they are second line because of increased side effects and the potential for severe toxic reactions. As in SSRIs, dosing should be slow (eg, 10mg of imipramine) and gradually titrated up to therapeutic doses over the next few weeks (imipramine 150-200 mg/day, desipramine 150-200 mg/day and nortriptyline 75-100 mg/day). Common side effects include sedation, blurring of vision, urinary incontinence, constipation and drying of the mouth. These result from the anticholinergic effects of tricyclics. At higher doses, serum levels can be drawn to monitor for toxicity.

MAOIs are avoided by a lot of clinicians because of the notorious "cheese/red wine/marmite reaction". If used carefully on reliable and compliant patients, MAOIs are broadly efficacious not only in panic disorder but also in many anxiety and depressive conditions. Phenelzine is dosed from 45-90 mg/day while tranylcypromine ranges from 30-60 mg/day. Both MAOIs are administered in divided doses, usually in the morning and early afternoon.

Other common side effects include weight gain, insomnia and orthostatic hypotension. MAOIs should always be considered in patients who are treatment resistant to other antidepressants.

### Benzodiazepines

Benzodiazepines are effective in treating symptoms of panic disorder. Clonazepam and alprazolam are preferred for panic disorder.<sup>1</sup> With a long half life of 15-50 hours, clonazepam can minimise inter-dosing withdrawal seen in shorter acting benzodiazepines like alprazolam (half life of 12-15 hours). On the other hand, alprazolam is quick acting, providing acute anxiolysis and, with a short half life, prevents oversedation. The major drawbacks to using benzodiazepines include sedation, behavioural disinhibition, cognitive impairment, as well as physical and psychological dependence.

To minimise dependence, benzodiazepines are used as temporary symptomatic treatment for two to four weeks until the antidepressants take full effect. To prevent withdrawal, gradual tapering of the benzodiazepine is recommended.

*References available on request.*