

# Anxiety Disorders

## ***Introduction***

Anxiety is a normal response to threat or danger. At times it is helpful since it mobilises energy reserves for action, and the increased level of arousal involved can improve performance in a range of situations. Anxiety is unhelpful, or pathological when it is experienced intensely, frequently and persistently and interferes with a persons daily living.

## ***Overview***

### **State v.'s trait:**

Each individual has typical enduring tendencies to react anxiously or not, and this is referred to as trait anxiety. At times people may experience anxiety because of specific experiences and this is termed state anxiety. Enduring tendencies to experience problematic anxiety may stem from early relationships in childhood, and be understood in terms of personality development or may be a product of genetic/ biological predisposition. High trait anxiety will mean that an individual is particularly vulnerable to experiencing high state anxiety in stressful situations. The perceived threat or danger prompting anxiety can be physical or social, where people experience a threat to their social and/or emotional well being.

### **Origins:**

Anxiety problems are typically found to have physiological, behavioural and cognitive aspects. People tend to avoid situations in which they have become anxious. This avoidance is reinforced (by the principle of negative reinforcement) since anxiety is reduced. However, avoidance increases the likelihood that anxiety will be experienced in similar situations in the future. People also tend to have negative, anxiety provoking thoughts and images (cognitions) about such situations and about their own physiological reactions.

Pathological anxiety may occur as a component of specific anxiety disorders, other psychiatric disorders or physical illnesses. The total point prevalence for anxiety disorders is 4.5% (GAD 2.5%; OCD 0.05%). Anxiety problems account for about 27% of GP consultations for emotional difficulties. The overall sex ratio (M:F) for anxiety disorders is between 1:2 and 2:3 with a peak age of onset between the ages of 25 and 44.

## ***Symptoms***

Anxiety can manifest itself in a number of ways, whilst quite arbitrary, symptoms can be grouped together as:

### **Psychological.**

- Inner tension
- Agitation
- Fear of loss of control
- Dread (that something catastrophic is going to happen - blackout, seizure, MI, death)
- Irritability
- Depersonalisation
- Derealisation

## **Physical.**

- Cardiovascular - tachycardia, palpitation
- Respiratory - dyspnoea, hyperventilation, chest tightness
- Gastrointestinal - borborygmi, urge to defecate/ loose bowels, dry mouth, epigastric sensation (butterflies), nausea
- Uro-genital - urinary urge
- Motor - tremor
- Autonomic - sweating

## ***Hyperventilation Syndrome***

As a component of anxiety disorders hyperventilation is of particular significance as it can be misdiagnosed as physical disorders, the treatment of which can have potentially hazardous outcomes, such as epilepsy (known as non-epileptic attack disorder) or myocardial ischaemia.

Rapid shallow breathing leads to hypocapnia and respiratory alkalosis. This in turn leads to physical symptoms such as paraesthesia (typically fingertip or peri-oral), lightheadedness, tetany/carpo-pedal spasm *etc.* The pattern of breathing itself, without adequate expiration taking place, leads to a feeling of chest tightness. These symptoms in turn lead to an increase in anxiety and the development of a "vicious circle".

Hyperventilation can occur in many psychiatric disorders, but not exclusively and can occur in "normal" individuals during unaccustomed exercise, SCUBA diving *etc.*

Treatment is classically by rebreathing into a paper bag. This, however, is unpleasant and compliance is unlikely. More useful is to encourage slowing of respiration with complete expiration. Longer term management is usually behavioural in addition to treatment of the primary disorder.

## ***Classification***

The various diagnostic classifications of anxiety disorders are listed below. Since there are general and specific principles in the treatment of anxiety disorders specifics will be covered on these pages and general principles will be covered on a subsequent page.

## **Generalised Anxiety Disorder (GAD)**

This is characterised by pervasive anxiety symptoms that are not restricted to specific situations (phobic disorder). Generalised anxiety may accompany phobias, and may be associated with other problems such as depression and substance abuse; it may also be caused by physical illness e.g. overactive thyroid, and may be associated with the emotional response to illness, e.g. myocardial infarction. Some 15% of people with anxiety problems have a sibling or parent with a similar problem. This may reflect a genetic component to vulnerability, or the effects of family environment. Although there is biological component to anxiety disorders, psychological factors invariably play an important part. Two thirds of sufferers are female.

## **Treatment:**

### **Psychological.**

In the acute state anxiety management is useful, as can be cognitive behavioural therapy. For chronic anxiety there may be a role for psychodynamic psychotherapy.

### **Physical.**

Sedative tranquillisers should be avoided due to the high risk of dependency.

There is frequently a role for tricyclic antidepressants such as clomipramine or SSRIs.

## Panic Disorder

In panic disorder there are recurrent attacks of panic that occur unpredictably and without obvious precipitants. It commonly co-exists with GAD or agoraphobia.

Panic attacks consist of attacks of severe anxiety with physical and psychological symptoms. Physical symptoms include tachycardia, palpitation, sweating, tremor *etc.* and may include hyperventilation. Psychological symptoms typically include dread, particularly of extreme events such as dying, having a seizure, losing control or going mad.

### Treatment:

#### Psychological.

Anxiety management is useful, as can be cognitive behavioural therapy. Where hyperventilation is present behavioural approaches to deal with this are appropriate.

#### Physical.

Sedative tranquillisers should be avoided due to the high risk of dependency.

There is frequently a role for tricyclic antidepressants such as imipramine and clomipramine or SSRIs.

## Phobic Disorders

A phobia is a fear that is disproportionate to the specific situation that prompts it and cannot be explained away. The person typically avoids the feared stimulus since the reduction of anxiety is powerfully reinforcing (known as negative reinforcement).

Some phobias represent heightened anxiety towards situations which people are evolutionarily 'prepared' to fear e.g. snakes, heights, sharp objects *etc.* In other instances a phobia may arise through conditioning. A traumatic experience may be associated with a neutral, non-threatening situation, which then itself becomes feared.

Phobias are typically situational, predictable and with anticipatory anxiety and avoidance. They are common in the general population but in only 2% are severe enough to prove disabling.

Some common phobias are:

**Simple phobias** - Here the phobia is specific to objects or situations and in many cases can be understood from an evolutionary perspective. Specific phobias include:

**Animal Phobias** (e.g. dogs, snakes, spiders [arachnophobia]) - onset is often in childhood, usually less than seven years and people were often shy and timid as children.

**Blood and Injury Phobias** - fear of blood tests, sight of blood *etc.*, results in fainting.

### Vertigo

**Agoraphobia** (syn. fear of the marketplace) - 75% of sufferers are women with a prevalence of 6.3 per 1000 population. Symptoms consist of intense fear of leaving the home, being in crowded spaces, travelling on public transport *etc.* that are difficult to leave. Agoraphobia may follow a life event threatening a person's security, or a physical illness. It can often be associated with marital problems, and may often mask them.

**Social phobia** - The sex ratio in contrast to agoraphobia is equal. Typically it involves a diffuse fear of social interaction, of talking to others eating, drinking and speaking in public.

## **Treatment:**

### **Psychological.**

Behaviour therapy involving graded exposure or desensitisation to the feared stimulus. A hierarchy of stages is worked out with the person, from least to most anxiety provoking.

Anxiety management is useful as can be cognitive behavioural therapy with strategies being taught to help people cope with the anxiety evoked, and the support of therapist and/or relatives is often crucial.

### **Physical.**

Sedative tranquillisers should be avoided due to the high risk of dependency.

There may be a role for antidepressants but only as an adjunct to psychological approaches.

## **Obsessive Compulsive Disorder (OCD)**

OCD is a relatively rare disorder. Whilst minor obsessional symptoms may occur in around 14% of a general population sample, OCD itself has a point prevalence of only 0.05% (6 month prevalence 1.3-2%; lifetime prevalence 1.9-3.3). It is distributed equally between both sexes and may only present late on after many years of active symptoms.

## **Symptoms.**

### **Obsessional thoughts:**

- These come repeatedly into the subjects mind against their will.
- They are unpleasant and often abhorrent.
- They are recognised as being the subjects own.
- They may be resisted (usually early, in around 50% at the time of presentation). This causes an increase in anxiety.
- Examples: contamination, doubting, images...

### **Compulsive acts (a.k.a. obsessional acts):**

- Repetitive actions based on obsessional thoughts.
- Not directly pleasurable (different from relieving the distress of the thoughts).
- Temporary relief of the tension and anxiety caused by the provoking thought.
- May have a symbolic quality (c.f. Lady Macbeth).
- Examples: checking, cleaning...

## **Aetiology.**

This has the strongest evidence for a biological aetiology for any of the anxiety disorders. There is a strong link with Gilles de la Tourette syndrome. Neuroimaging studies show abnormality in the basal ganglia, anterior cingulate cortex and orbitofrontal cortex.

33% of those with OCD do not have premorbid obsessional (anankastic) personality traits, indeed those with these traits are more likely to develop depression.

There are a number of theories predicated on the role of learning and development. The former considers the role of negative reinforcement and the reduction of anxiety caused by the obsessional rituals. The latter psychoanalytic theory emphasises the role of repression of unacceptable impulses and regression to the anal stage of development, with thought patterns dominated by magical thinking.

## **Treatment:**

### **Psychological.**

Obsessional thoughts can be challenged using a technique known as *thought stopping*, where a distraction is used to interrupt the thought.

Compulsive acts are treated by graduated exposure to the environmental stimulus, either *in vivo* or using imagery, whilst the patient resists the rituals. This is known as *response prevention*.

Anxiety management is useful as can be cognitive behavioural therapy with strategies being taught to help people cope with the anxiety evoked, and the support of therapist and/or relatives is often crucial.

### **Physical.**

Clomipramine, SSRIs, lithium and tryptophan all are used in the pharmacological management of OCD. This is the most effective management technique in the short term but its efficacy and duration of action is increased when used in conjunction with behavioural or cognitive behavioural techniques.

ECT has been used in cases where the disorder is severe, unresponsive to medication and/or there is significant depressive symptomatology.

In the most severely disabled patients neurosurgery may be considered.

## **Stress Related Disorders**

The psychological sequelae to stressful events often include symptoms of anxiety. There are three types of reactions that are partly characterised by their differing symptomatology, but also by their different temporal relationship to the stressful event.

### **Acute stress reaction.**

Onset is within minutes, if not immediately, and resolves rapidly. When removal from the stressor is possible resolution is within a few hours, but when it is maintained there is a more gradual, albeit still rapid, reduction in symptoms, with only minimal symptoms remaining after 3 days.

Symptoms are mixed and usually changing with the patient appearing dazed and disorientated. In addition to symptoms of anxiety anger and withdrawal may be seen.

### **Adjustment reaction.**

Onset is usually within 1 month of the stressful event and symptoms tend not to endure beyond 6 months.

Symptoms may include depression, anxiety, irritability and a feeling of being unable to cope.

### **Post traumatic stress disorder (PTSD).**

Onset is delayed weeks to months from a stressor that is of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone. It may persist for years.

Symptoms include flashbacks, nightmares, avoidance, autonomic hyperarousal with hypervigilance, anxiety, depression, guilt, emotional blunting

## **Somatoform Disorders**

Somatoform disorders are characterised by the primary problem being a physical presentation or concern secondary to a psychological problem. They are an important group of disorders to be aware of since patients with them often present to GP's and physicians rather than psychiatrists.

**Somatisation disorder.**

Dramatic presentation of multiple, recurrent and frequently changing physical symptoms. Many negative investigations have usually been carried out in the years prior to referral to a psychiatrist.

The disorder is more common in women than men and usually starts in early adult life.

**Hypochondriasis.**

A persistent belief in the presence of at least one serious physical illness despite negative physical findings and reassurance. Alternatively the patient may have a persistent preoccupation with a presumed deformity or disfigurement.

**Dissociative (conversion) disorders.**

Occurs secondary to internal conflict.

Includes conversion symptoms (the conversion of underlying conflict into, often representative, physical symptoms, amnesia, fugues (amnesia plus an apparently purposeful journey away from home or workplace with maintenance of self-care), stupor.

***Treatment***

Specific management of disorders is considered under each heading above.

**General principles.**

As with all psychiatric disorders a careful history needs to be taken. Particular attention being paid to physiological, emotional, cognitive and behavioural aspects. Physical illness needs to be excluded e.g. tachycardia and weight loss may be due to hyperthyroidism; palpitation and other panic symptoms may be due to mitral valve prolapse; sweating, tachycardia etc. may be due to a phaeochromocytoma. The presence of other psychiatric disorder needs to be explored.

Physical investigations may be necessary where the history suggests physical illness, however, needless investigations in hypochondriasis, to reassure the physician, may reinforce anxiety in these patients.

Address social problems as well as using specific approaches e.g. poor housing, financial problems. Always explore the topic of substance misuse.

Avoid use of benzodiazepines.