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A Hitchhiker's Guide to Anxiety Disorders

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Abstract

AD is the commonest mental disorder with a lifetime prevalence rate of 21.1% in Europe, 31.0% in the United States[2,3], a point prevalence of 5%, and a greater preponderance amongst women[4]. In India amongst adolescents, it is estimated to be between 29-41%. Living with ADs can be a long-term challenge. In many cases, it occurs along with other mood disorders[5,6]. In most cases, AD improves with psychological therapies and/or medication. Making lifestyle changes, learning coping skills and using relaxation techniques also can help. However, failure to treat AD and its consequences can be costly both economically and socially.
It is therefore imperative that there is early recognition of the disorder as that improves the scope for treatment and the prognosis. This guide describes key aspects of the various subtypes of AD and how to manage them.

Key words
Anxiety disorders; Hitchhiker's guide

Introduction

It is normal to feel anxious or have everyday worries from time to time, especially if life is stressful. However, excessive, ongoing anxiety and worry (defined as clinical worry)[1] that are difficult to control and that interfere with day-to-day activities may be a sign of an Anxiety Disorder (AD). AD is the commonest mental disorder with a lifetime prevalence rate of 21.1% in Europe, 31.0% in the United States[2,3], a point prevalence of 5%, and a greater preponderance amongst women[4]. In India amongst adolescents, it is estimated to be between 29-41%.

It is possible that AD may develop in childhood or in adults. The commonest AD is Generalised Anxiety Disorder (GAD). Other less common anxiety disorders are panic disorder, obsessive-compulsive disorder, phobias, post-traumatic stress disorder and other types of anxiety. All ADs share the core features of psychological distress accompanied by somatic/physiological response. Individual ADs are distinguished by the trigger or stimuli which generates anxiety. For instance, in post-traumatic stress disorder, anxiety is attributable to the memory of a traumatic event, whereas, in phobias, anxiety is generated by irrational fear of a specific object or situation (e.g. spiders or of social situations).

Living with ADs can be a long-term challenge. In many cases, it occurs along with other mood disorders[5,6]. In most cases, AD improves with psychological therapies and/or medication. Making lifestyle changes, learning coping skills and using relaxation techniques also can help. However, failure to treat AD and its consequences can be costly both economically and socially. Data from the World Health

Organization has demonstrated that 56.3% of those with GAD were severely disabled[7], while another prospective, naturalistic, longitudinal, multicentre study of a clinical population with anxiety disorders reported that 37% of participants with GAD were in receipt of public assistance, only about 50% of the total sample were employed full time and 9% had a history of suicidal attempts or gestures[8].

It is therefore imperative that there is early recognition of the disorder as that improves the scope for treatment and the prognosis. This guide describes key aspects of the various subtypes of AD and how to manage them.

Some commonly diagnosed Anxiety Disorders are:

- Generalised Anxiety Disorder (GAD)
- Panic disorder
- Phobic Disorder
- Post-traumatic stress disorder (PTSD)
- Health anxiety
- Body dysmorphic disorder
- Obsessive compulsive disorder (OCD)

There are other less common Anxiety Disorders which are not in the scope of this guide, such as:

- **Perinatal anxiety or perinatal obsessions** – anxiety problems that develop during pregnancy or in the first year after giving birth.
- **Separation anxiety disorder** – which can occur in children as well as adults. People who have separation anxiety disorder have fears about being parted from people to whom they are either psychologically attached or dependant on. Often, there is co-dependency between them and the subject of their attachment. People affected by separation anxiety disorder often worry that some sort of harm or something untoward will befall on the people they are attached to, if they are separated. This disorder can also arise in long term abuse victims and in victims of kidnapping, often loosely referred to as Stockholm syndrome, in cases where they develop a psychological attachment to their captors.
- **Social anxiety** - anxiety and nervousness occur with an intense fear of social interactions which often affect school or work. Selective mutism is a type of social anxiety disorder that occurs exclusively in children. It is characterised by children fearing to speak in public places like the school assembly or playground, but talking and behaving normally at home.

What are Anxiety Disorders?

Anxiety can be experienced in lots of different ways. However, there are certain criteria that might indicate that patients may have a specific type of Anxiety Disorder.

Characteristics of ADs

Generally, ADs present with a combination of symptoms of GAD and Panic Disorder, but the component features for each diagnosis vary.

Generalised Anxiety Disorder (GAD)

This constitutes regular and/or uncontrollable worries about many different things in everyday life. Also, it tends to be heterogenous, with a wide variety of symptoms so that one person's experiences might be quite different from another's.

The lifetime prevalence of GAD is greater in women (5.3%) than in men (2.8%)[9]. Women are more likely to present with somatic symptoms, and have a higher risk for concomitant mood disorder, specific phobia and panic disorder, while men more likely to have substance misuse disorder, alcohol and nicotine dependence, and antisocial personality disorder[9]. Also, disability associated with GAD is greater for women than men.

Symptoms: The symptoms of GAD can vary. Psychological symptoms may include persistent worrying or anxiety about a number of areas that are out of proportion to the impact of the events, overthinking plans and solutions to all possible

worst-case outcomes, perceiving situations and events as threatening, even when they aren't, difficulty handling uncertainty, indecisiveness and fear of making the wrong decision, inability to set aside or let go of a worry, inability to relax, feeling restless, and feeling keyed up or on edge and difficulty concentrating, or the feeling that the mind "goes blank".

Physical signs and symptoms of anxiety (these may be present in, but are not limited to GAD) affect most bodily systems. Anxiety may affect the musculoskeletal system by inducing tension, fatigue or aching of the muscles. In the central nervous system, anxiety may produce hyperarousal, paraesthesia, tachycardia, palpitations, diaphoresis or tremors. Additionally, anxiety may induce gastrointestinal symptoms including nausea, diarrhoea or irritable bowel syndrome. Alternatively, symptoms of anxiety may manifest as genitourinary symptoms, such as urinary frequency or urgency. No system is spared.

Somatic symptoms of anxiety frequently relate to specific irrational health concerns. For example, the onset of headaches might result in a fear of having a brain tumour, chest pains are misinterpreted as a heart attack, and so on. Alternatively, anxiety related to contracting coronavirus may present as a cough. For people affected by health anxiety, specific health preoccupations may persist despite conclusive evidence indicating the absence of such condition.

There may be times the anxiety may not be acute or severe, but patients may still feel anxious even when there is no apparent reason. This is called ‘free-floating anxiety’. For example, patients may feel intense worry about their safety or that of their loved ones, or they may have a general sense that something bad is about to happen. They may feel depressed or irritable, have trouble with drinking or drugs, or have other mental health concerns along with anxiety. Not infrequently, severe anxiety can lead to suicidal thoughts or behaviours and cause significant distress in social, work or other areas of life. These worries can oscillate from one concern to another and may change with time and age.

Panic Disorder

Panic disorder is characterised by regular or frequent panic attacks. Panic attacks are an abrupt surge of intense fear or discomfort accompanied by physical symptoms, reaching maximal intensity within minutes. Panic attacks occur in other anxiety states such as phobias. However, in Panic Disorder, panic attacks have no identifiable trigger, whereas in phobias, there is a defined source of fear.

In a large study, the National Comorbidity survey showed that about 15% of respondents reported the occurrence of a panic attack over their lifetimes, 3% reported a panic attack in the preceding month, and about 1% suffered a panic disorder in the month preceding the survey[10]. The lifetime prevalence of panic disorder is greater in women than men, with estimates varying between 2.5 times and four times more frequent in women[11].

Symptoms in adults: The symptoms are psychological, i.e. intense fear, as well as physical, i.e. symptoms of autonomic arousal such as palpitations, hyperventilation, sweating, headaches, dizziness, stomach cramps and diarrhoea. Experiencing panic disorder can mean that patients feel constantly afraid of having another panic attack, to the point that this fear itself can trigger panic attacks. It is that perceived fear factor or threat, however real or unreal, that provokes an extreme autonomic response.

Symptoms in children and teenagers: Children and teenagers may have similar worries to adults, but also may have excessive worries about performance at school or sporting events, family members' safety, being punctual, or other catastrophic events. A child or teenager with excessive worry may feel overly anxious to fit in the school class or playground, spend excessive time doing homework, have a crisis in confidence, seek approval and reassurance a lot of the time. Anxiety in children may manifest as frequent stomach aches, fainting episodes or other physical complaints, and in extreme cases may result in avoidance of attending school, or school phobia.

Phobic Disorder

A phobia is an extreme fear or anxiety triggered by a particular well-defined event or situation (such as heights) or animal (such as spiders), that is either not threatening or dangerous or is disproportionate to the threat.

Estimates of a large survey in the US showed that the prevalence of specific phobia among adults was 13.8% of all adults, with a higher prevalence for females (17.5%) than for males (9.9%), and an estimated 12.5% of adults experiencing specific

phobia at some time in their lives[12]. Phobias tend to be highly co-morbid, with two or more phobias often co-existing in one individual.

Symptoms: People with a phobia have an exaggerated response to a non-threatening or threatening situation. Often, the fear of the situation is so intense that they go to great lengths to avoid the subject of their phobia. Where these are unavoidable, they induce distressing anxiety. Common objects of phobias include flying, heights, closed spaces (claustrophobia), animals (commonly reptiles, and arachnophobia which is a specific phobia for spiders, scorpions and ticks), visiting hospitals/dentists, giving blood or being given injections.

The most common specific phobias are as follows:

- **Social anxiety disorder or social phobia:** The main stimulus for anxiety in social phobias is a social situation – such as eating in a restaurant, public speaking or even speaking to another person. Social phobias are fairly common with a point-prevalence rate estimated at 15.6%[13] and lifetime prevalence ranging from 0.5% to 16.0%, point prevalence in primary care ranging from 2.9% to 7.0%, an overall preponderance in females than males by a ratio of 1.5:1, and an average age of onset between 15 and 18 years. Social phobia often co-occurs with another psychiatric disorder; this relationship was present in as many as 81% of individuals according to the National Comorbidity Study[14], with another anxiety disorder (56.9%) being the most common finding followed by a mood disorder (41.4%) and substance misuse disorder (39.6%).
- **Agoraphobia:** Agoraphobia is a relatively less common anxiety disorder. Kessler et al (2006)[6] reported a lifetime prevalence estimate for panic attack with agoraphobia and without panic disorder as 0.8%, and 1.1% for panic disorder with agoraphobia. Again, it is more common in women, with the female to male ratio being 2.2:1[14]. Although agoraphobia is usually regarded as a fear of open spaces, the term includes the fear that they will not be able to, or might find it very difficult to, leave a particular situation, and that they might embarrass themselves in front of others by having a panic attack or other physical reactions. So, other examples of agoraphobia include the fear of using public transportation, standing in line or being in a crowd and being outside of the home alone. Avoidance of anxiety provoking situations is a common coping mechanism and in the most severe form of agoraphobia an individual can become completely housebound. The presence of agoraphobia with or without any other psychiatric disorder worsens the prognosis and chances of recovery.

Post-traumatic stress disorder (PTSD)

People with PTSD develop anxiety problems after going through something they found traumatic. This could be a distressing personal experience or may result from witnessing something that is a terrifying. PTSD has sometimes been referred to as 'shell shock' and 'combat fatigue', mainly because it has its origins in survivors of wars. However, it does occur in civilians and can occur in people of any culture or nationality. Traumatic neurosis is a less fashionable term that has been used to define a psycho-pathological state that arises from distressing anxiety that follows soon or long after an intense emotional shock.

PTSD affects around 8% of the adult general population and 4% of teenagers every year, with a lifetime prevalence risk of 8% in adolescents. In common with other anxiety disorders, women are almost twice as affected as men[12].

Symptoms: PTSD can present immediately after a catastrophic event, or follow after a latency period of weeks or even months. It can involve experiencing flashbacks or nightmares which can feel like re-living all the fear and anxiety experienced at the time of the traumatic events. Avoidance of triggers of the offending trauma is common as is insomnia. Symptoms of PTSD tend to be at their worst near the time of the event, and do generally diminish with effective care and treatment.

Health anxiety

Health anxiety is an obsessive preoccupation relating to illness. Researching symptoms or repeated checking for the symptoms are characteristics of health anxiety. The term has been categorised in many different ways, because there is no definitive diagnosis that can be attributed to the broad range of symptoms that patients present with, to the doctor. Various terms that have been in

use are: somatisation disorder, somatoform disorder, hypochondriasis, In extreme cases, patients will convince themselves that they have a serious medical condition such as a heart attack, cancer or serious infection such as a sexually transmitted disease.

Epidemiological studies suggest that health anxiety occurs in 5-6% of the population, but the rates vary from 2-10%[15]. The strive for healthy living and ease of internet access has probably contributed to the increase in healthcare utilisation[16]. Patients with health anxiety are significant users of general practice, secondary care and mental health services[17], though in most cases they are so convinced that they have a physical illness that seeing a psychiatrist or psychologist is the last stop.

Symptoms: Health anxiety manifests as constant worry about health, frequently checking the body for signs of illness, such as lumps, and a persistent, obsessional thought that the doctor has either missed something or that they have not adequately tested them for something specific such as cancer. Sometimes the person will avoid seeing the doctor for fear that they do not want confirmation of their fears. are always asking people for reassurance that you're not ill; worry that a doctor or medical tests may have missed something obsessively look at health information on the internet or in the media avoid anything to do with serious illness, such as medical TV programmes act as if you were ill (for example, avoiding physical activities). Anxiety itself can cause symptoms like headaches or a racing heartbeat, and you may mistake these for signs of illness.

They indulge in excessive searching on the internet or through blogs for clues to their perceived problem, often having the opposite effect of reinforcing in them that they have the illness. Commonly, these patients are overly dependent on their smartphone or smart tablet, from which they are rarely apart. They will visit multiple specialists at considerable expense, demand multiple investigations, and, frustrated by the lack of relief, they might resort to alternative therapies. The condition can be mistaken for OCD, though OCD patients can also have health anxieties.

Body dysmorphic disorder (BDD) or Body Dysmorphia

This is a distressing condition which involves a preoccupation with physical appearance. Estimates suggest a point-prevalence rate of between 1.7% and 2.4% and a 12-month prevalence rate ranging from 1.7 to 2.9%, with a median of 1.9%[18].

Symptoms: These patients have perceived defects in their appearance and parts of the body, even though these might be minor. They feel so self-conscious that they may avoid meeting with family, friends and they may also avoid social situations.

People with BDD focus on their appearance, particularly those parts of their body which they believe to have been damaged, distorted or diseased, to the point where they become severely distressed and sometimes suicidal. Indeed, individuals with BDD report higher rates of suicidal ideation (19% v. 3%) and suicide attempts (7% v. 1%) than individuals who did not meet criteria for BDD[19]. They might repeatedly check the mirror or continually seek reassurance particularly from medical practitioners, to the exclusion of other routine activities. They demonstrate compromised social functioning; social withdrawal and avoidance is frequently attributable to anxiety and shame regarding perceived defects in appearance. At the extreme end, there is a near-delusional component where the individual just cannot be reassured, and indeed might feel angered that they are not believed.

In severe cases, patients resort to numerous cosmetic procedures to try to 'correct' the perceived defect, and they can fall prey to unscrupulous practitioners, spending vast amounts of monies in order to 'put things right'.

Obsessive Compulsive Disorder (OCD)

OCD is typified by obsessions and/or compulsions which interfere with daily functioning[20]. Symptoms of OCD generally emerge in early adulthood, with a mean age of onset of 19.5 years old[21].

Symptoms - Obsessions are recurrent and intrusive thoughts, images, concerns, or urges. In OCD, obsessions are frequently, but not always, accompanied by compulsions. Compulsions involve repetitive behaviours or mental acts. In OCD, the motivation for compulsive behaviours is often to alleviate anxiety related to an obsession, or to achieve a feeling of correctness. Completion of a compulsive behaviours may provide short-term relief from obsession-related anxiety[22]. However, compulsions seldom improve levels of anxiety long-term. Indeed, compulsive behaviours are associated with distress and impaired daily functioning[23].

The most prevalent obsession experienced by people with OCD is fear of contamination and subsequent illness. Compensatory compulsive behaviours may include excessive cleaning or checking[24]. Contamination OCD is widely recognised by society[25]. However, obsessions in OCD are heterogeneous, and compulsions may not be outwardly perceptible. Resultantly, recognition and diagnosis of OCD in non-typical presentations may be challenging[26].

OCD frequently co-occurs with alternative psychiatric conditions. In a recent international study, major depressive disorder was found to be the most frequently co-occurring psychiatric diagnosis to accompany OCD[27]. Comorbidity may affect the prognosis and course of OCD[25]. Therefore, assessment of comorbid psychiatric disorders is an important component of care for individuals with OCD.

The prognosis of OCD is varied. Individuals with a shorter duration of OCD symptoms and a lesser severity of symptoms before treatment more likely to achieve remission[28]. There is evidence that some cases of OCD can resolve without treatment[29]. However, the initial severity of OCD symptoms in those who experience full recovery without intervention may be relatively minor, more severe cases are less likely to spontaneously remit.

Causes of AD

As with many mental health conditions, the cause of AD is multifactorial and arises from a complex interaction of biological and environmental factors, which may include:

- *Differences in brain chemistry and function* – Pathological changes in brain structure and function.: Specific areas of the brain such as amygdala are now believed to be playing a key role in causing and modulating fear and anxiety. Neurotransmitters such as serotonin, norepinephrine, dopamine, and gamma-aminobutyric acid (GABA) have been implicated in the causation of anxiety.
- *Physical or mental health problems* - Other health problems such as an overactive thyroid, infectious diseases, mitral valve prolapse and hypertension can sometimes cause anxiety, or might make it worse. Living with a serious, ongoing or life-threatening physical health condition can sometimes trigger anxiety. Equally, anxiety may arise concurrently with other mental health problems, such as depression or dementia.
- *Iatrogenic causes* – A number of medications can cause anxiety, such as salbutamol, levothyroxine, antidepressants, steroids, ADHD medication, drugs for Parkinson's disease, medication with caffeine, etc.
- *Genetics* – It is estimated that there is a 5-fold increased risk of developing AD if a close relative (parent, sibling or child) has the condition. At the moment there is not enough evidence to show whether this is because we share some genes that make us more vulnerable to developing anxiety, or because we learn by a process called modelling particular ways of thinking and behaving from our parents and other family members as we grow up
- *Development and personality* - Difficult experiences in childhood, adolescence or adulthood are a common trigger for anxiety problems. Going through stress and trauma when patients are very young is likely to have a particularly big impact. Experiences which can trigger anxiety problems include early life physical or emotional abuse, neglect, losing a parent, being bullied or being socially excluded.
- *Lifestyle* – There are any number of everyday issues that can trigger or worsen anxiety. For example build-up of stress, burn out, constant change or uncertainty, feeling under pressure, long working hours, being out of work, financial problems, housing problems and homelessness, worrying about the environment or natural disasters (sometimes called climate anxiety or eco-anxiety), losing someone close (bereavement), feeling lonely or isolated, being abused, bullied or harassed. Alcohol and stimulant drugs can precipitate extreme anxiety during ingestion as well as withdrawal, particularly when misused or dependant individuals.

Complications of AD

Having AD can be disabling. It can impair a person's ability to perform tasks quickly and efficiently because they are so distracted. Persistent anxiety saps confidence, causes fatigue and in some cases leads to significant disability or impairment in

activities of daily living, necessitating reliance on others for personal care and safety..

AD can also lead to or worsen other physical health conditions, such as digestive or bowel problems like irritable bowel syndrome or gastric ulcers, headaches, chronic pain, hypertension, cardiac problems and strokes.

AD often co-exists with other mental and physical health problems, which can make diagnosis and treatment more challenging. Some mental health disorders that commonly occur with AD include mood disorders such as depression; substance use disorders including alcohol, cannabis and nicotine and abuse of prescribed drugs, such as sedatives and minor tranquillisers; dementia and delirium in older people; medical and neurological disorders ranging from epilepsy to multiple sclerosis may also complicate the clinical picture.

Prevention

There is no way to predict for certain what will cause someone to develop GAD, but people can take steps to delay or prevent onset of the condition or reduce the impact of symptoms:

1. **Keeping a diary.** Keeping track of personal circumstances can help identify what is causing the stress and what seems to alleviate it.
2. **Prioritising issues.** Preserving energy for meaningful activity will help in ensuring that less important tasks are not a distraction.
3. **Avoiding unhealthy substance use.** Alcohol, drugs, nicotine or caffeine abuse can cause or worsen anxiety. On the flipside, abrupt quitting can make patients anxious and so it is advisable for those that are dependent on these substances to seek medical help or find a treatment program or support group to help them.

Treatment

Getting help early is the key to success. Anxiety, like many other mental health conditions, can be harder to treat the longer people wait to have it treated. Some patients may require pharmacological treatments for their AD, especially if the symptoms are debilitating or chronic. However, psychological therapies and other aides are helpful for the vast majority of ADs. Most patients will benefit from a combination of pharmacological and psychological therapies. Treatment has to be individually tailored, and it does rather depend on the type of AD they might present with. ADs can be long term in many patients and therefore permanent relief, while desirable, may not be possible and therefore containment and relief of acute symptoms would be the rule.

Self Help

AD is a fluctuating and potentially long-term condition, but a number of different treatments can help. Quite often, they will have developed poor coping mechanisms such as alcohol and drug misuse or anger, so the first task is usually to help them unlearn these and then learn better coping strategies.

Psychological therapies

Patients with any of these conditions must be advised to try psychological treatment before they are prescribed medication, unless their condition is severe and disabling and/or previous psychological treatment has had little or no benefit to them.

The following might be tailored according to the individual's needs, sometimes with more than one therapy as part of their repertoire of coping skills.

Guided self-help

First, a guided self-help course might help them learn to cope with their anxiety.

This involves working through a CBT-based workbook or computer course in their own time with the support of a therapist. Or they may be offered group therapy where other people with similar problems meet with a therapist, thus learning from the therapist as well as other sufferers. Guided self-help involves patients learning what triggers their anxiety, finding a way of coping with it if it cannot be eliminated, journalling, exercising regularly, maintaining a positive attitude, getting adequate sleep, eating well- balanced diets, practicing relaxation techniques such as yoga, meditation, stopping smoking and substances of misuse, including caffeine. In the event that this does not alleviate the problem then more intensive

psychological therapy or medication must be offered.

Cognitive behavioural therapy (CBT)

There is considerable evidence that psychological therapies like Cognitive Behavioural Therapy (CBT) and relaxation techniques are of benefit in AD. CBT aims to help patients identify and change their pattern of thinking and thus modulate their behaviour to enable them to cope with situations that they find stressful. It usually involves meeting with a specially trained and accredited therapist for a 1-hour session every week for 10-12 sessions. CBT is widely available in the United Kingdom through primary care based Integrated Access to Psychological Therapies (IAPT) programmes.

Other forms of psychological therapies

Although CBT is regarded as being the most effective in treating the range of anxiety disorders, other therapies such as Exposure therapy, Eye Movement Desensitisation and Reprocessing (EMDR) having a role in phobias and PTSD respectively. EMDR is promoted by the National Institute for Health and Care Excellence as the therapy of choice for PTSD.

Relaxation and meditation techniques

Relaxation focuses on relaxing muscles in a particular way during situations that usually cause anxiety.

The technique needs to be taught by a trained therapist, but generally involves learning how to relax muscles quickly in response to a trigger, where the trigger causes tension in the muscles through anxiety. As with CBT, relaxation therapy will usually mean meeting with a therapist for a 1-hour session every week for 10-12 sessions. Guided relaxation and meditation including Yoga, Pilates and Tai-Chi are now also available remotely.

Medication

If the psychological treatments above haven't helped or the condition is acute and severe, the patient should be offered medication. There are a variety of different types of medication to treat AD. Some medications are designed to be taken on a short-term basis, while other medicines are prescribed for longer periods. Depending on the symptoms, they may need medication to treat psychiatric symptoms as well as physical ones.

The doctor must discuss in detail the different options with the patient before starting them on a course of treatment, including the different types of medication, length of treatment and possible side effects and interactions with other medicines.

The main medications to treat AD are described below.

Selective Serotonin Reuptake Inhibitors (SSRIs)

In most cases, the first medication to be tried would be a Selective Serotonin Reuptake Inhibitor (SSRI). This type of medication works by increasing the level of serotonin in the synaptic space by inhibiting its reuptake. Examples of SSRIs include citalopram, escitalopram, fluvoxamine, fluoxetine, paroxetine and sertraline.

While any or all of these are tried in clinical practice, the licenced prescriptions are as follows:

- GAD: paroxetine and escitalopram;
- Panic Disorder: citalopram, escitalopram, paroxetine and sertraline;
- Social phobias: escitalopram, paroxetine and sertraline;
- PTSD: paroxetine and sertraline
- OCD: escitalopram, fluoxetine, fluvoxamine, paroxetine and sertraline.

SSRIs can be taken on a long-term basis but, as with all antidepressants, they can take several weeks to start working. Start low, go slow is the rule with these drugs as it is for most psychotropic drugs. Common side effects of SSRIs include feeling agitated, feeling or being sick, indigestion, diarrhoea or constipation, loss of appetite and weight loss, dizziness, blurred vision, dry mouth, excessive sweating, headaches, problems sleeping (insomnia) or drowsiness, low sex drive, difficulty achieving orgasm during sex or masturbation, and in men, difficulty obtaining or maintaining an erection (erectile dysfunction). These side effects should improve over time, although some – such as sexual problems – can persist. After a 6-8 week trial of the drug has not been effective then it is usual practice to change to another SSRI or t another class of drugs.

Serotonin and noradrenaline reuptake inhibitors (SNRIs)

If SSRIs do not help ease their anxiety, a trial with a different type of antidepressant known as a serotonin and noradrenaline reuptake inhibitor (SNRI) which boost the amount of available serotonin and noradrenaline in the synaptic space, is warranted.

Examples of SNRIs include:

- venlafaxine
- duloxetine

Recent data supports the use of duloxetine in pain patients so this might be considered the treatment of choice in those AD patients who are experiencing pain.

Common side effects of SNRIs include feeling sick, headaches, drowsiness, dizziness, dry mouth, constipation, erectile dysfunction in men, insomnia and sweating. SNRIs can also increase blood pressure, so this may need to be monitored regularly during treatment.

As with SSRIs, some of the side effects (such as feeling sick, an upset stomach, problems sleeping and feeling agitated or more anxious) are more common in the first 1 or 2 weeks of treatment, but these usually settle as the body adjusts to the medication.

Other antidepressants

A trial of other antidepressants depending on the patient's symptom profile and response to the above medications might become necessary. So, venlafaxine or mirtazapine (noradrenergic and specific serotonergic antidepressants, SNRI or NaSSA drugs), trazodone (a tetracyclic that enhances serotonin in the brain) or clomipramine and sister drug imipramine (classified as tricyclics, and are broad spectrum which enhance serotonin, noradrenaline, dopamine and the anticholinergic system) might be alternative choices.

Pregabalin

If SSRIs and SNRIs are not suitable, pregabalin might be an appropriate drug to be prescribed. However, this can lead to dependency in some patients. Pregabalin has additional anticonvulsant properties and therefore it is used to treat epilepsy, and it can be beneficial in treating co-existing anxiety. Side effects of pregabalin include drowsiness, dizziness, increased appetite and weight gain, blurred vision, headaches, dry mouth, and vertigo. Pregabalin is less likely to cause nausea or a low sex drive than SSRIs or SNRIs.

Gabapentin

There are many similarities between gabapentin and pregabalin. Both are anticonvulsants, both may be used to manage pain, and they can reduce anxiety symptoms too. Similar to Pregabalin, Gabapentin has also been linked with the risk of abuse and dependence.

Benzodiazepines

Benzodiazepines are a type of sedative that may sometimes be used as a short-term treatment during a particularly severe period of anxiety. This is because they help ease the symptoms within 30 to 90 minutes of taking the medication. Amongst these drugs, diazepam is the most commonly prescribed due to its long acting properties and also because withdrawal from this drug is relatively easier than the short acting benzodiazepines like lorazepam which can be highly addictive. These days, benzodiazepines are only used in very exceptional circumstances (such as Intractable Anxiety disorders), or when close monitoring is possible. Although benzodiazepines are very effective in treating the symptoms of anxiety, they must not be used for long periods. This is because they can become addictive if used for longer than 4 weeks. Benzodiazepines may start to lose their effectiveness over time. Side effects of benzodiazepines can include drowsiness, difficulty concentrating, headaches, vertigo, an uncontrollable shake or tremble in part of the body (tremor), and low sex drive. As drowsiness is a particularly common side effect of benzodiazepines, patients must be warned that their ability to drive or operate machinery may be affected by taking this medication. Patients should also refrain from drinking alcohol or using opiate drugs when taking benzodiazepines, as doing so can be dangerous.

Social factors: Social support from friends and family play an important role in the management of anxiety disorders. Where possible addressing stressors with reasonable adjustments for example reducing workload or getting help with exam revision or extra time can also help to reduce symptoms of anxiety alongside any psychological and pharmacological treatment.

Conclusion

ADs are the commonest mental disorder and they can be managed well, provided that the patient, therapist and doctor, if involved, work in harmony.

A positive attitude is a key ingredient, but anxiety can be like a stallion – creates chaos when it's running wild, but once tamed can lead to success and great achievements!

References:

1. Hoyer, J., Becker, E.S. and Margraf J. Generalized anxiety disorder and clinical worry episodes in young women. Psychological Medicine, 2002, 32, 1227–1237. doi: 10.1017!S0033291702006360.
2. Kessler, R. C., Angermeyer, M., Anthony, J. C., De Graaf, R., Demyttenaere, K., Gasquet, I., … Üstün, T. B. Lifetime prevalence and age-of-onset distributions of mental disorders in the world health organisation's world mental health survey initiative. World Psychiatry, 2007, 6(3), 168–176.
3. Wittchen, H. U., & Jacobi, F. Size and burden of mental disorders in Europe - a critical review and appraisal of 27 studies. In: European Neuropsychopharmacology, 2005, 15, pp. 357–376.
4. Hantsoo, L., and Epperson, C.N. Anxiety Disorders Among Women: A Female Lifespan Approach. Focus (Am Psychiatr Publ), 2017, 15(2): 162–172. Apr 6. doi:0.1176/appi.focus.20160042.
5. Kessler, R.C., Gruber ,M., Hettema, J.M., Hwang, I., Sampson, N., and Yonkers, K.A. Co-morbid major depression and generalized anxiety disorders in the National Comorbidity Survey follow-up. *Psychological Medicine,* 2008, 38:365–374. doi: 10.1017/S0033291707002012.
6. Cummings, C.M., Caporino, N.E., and Kendall, P.C. Comorbidity of anxiety and depression in children and adolescents: 20 years after. *Psychol Bull.,* 2014, 140:816–845.
7. Kessler, R.C., Chiu, W.T., Jin, R., Ruscio, A.M., Shear, K., and Walters EE. The epidemiology of panic attacks, panic disorder, and agoraphobia in the National Comorbidity Survey Replication. Arch Gen Psychiatry, 2006, 63(4): 415–424. doi: 10.1001/archpsyc.63.4.415.
8. Massion, A.O., Warshaw, M.G., and Keller, M.B. Quality of life and psychiatric morbidity in panic disorder and generalized anxiety disorder. Am J Psychiatry, 1993, 150(4):600-7. doi: 10.1176/ajp.150.4.600.
9. Vesga-López, O., Schneier, F.R., Wang, S., et al. Gender differences in generalized anxiety disorder: results from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). *J Clin Psychiatry*, 2008, 69:1606–1616.
10. Eaton, W.W., Kessler, R.C., Wittchen, H.-U., and Magee, W.J. Panic and panic disorder in the United States. Am J Psychiatry, 1994, 151:413-420. PMID: 8109651 DOI: 10.1176/ajp.151.3.413.
11. Joyce, P.R., Bushnell, J.A., Oakley-Browne, M.A., Wells, J.E., Hornblow, A.R. The epidemiology of panic symptomatology and agoraphobic avoidance. Comprehensive Psychiatry, 1989, 30:303-312.
12. Kessler, R.C., Petukhova, M., Sampson, N.A., Zaslavsky, A.M., Wittchen, H.-U. Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. Int J Methods Psychiatr Res., 2012, 21(3): 169–184. doi: 10.1002/mpr.1359.
13. Furmark, T., Tillfors, M., Everz, P.-O., et al. Social phobia in the general population: prevalence and sociodemographic profile. Soc Psychiatry Epidemiol 1999; 34:416-424.
14. Magee, W.J., Eaton, W.W., Wittchen, H.-U., McGonagle, K.A., and Kessler, R.C. Agoraphobia, simple phobia, and social phobia in the National Comorbidity survey. Arch Gen Psych, 1996, 53: 159-168.
15. Looper, K. and Dickinson P. Epidemiological and Economic Aspects of Hypochondriasis and Health Anxiety. In: Hypochondriasis and Health Anxiety: A Guide for Clinicians. Editors: Starcevic V. and Noyes R. jr.

Oxford University Press, 2014, Ch. 6, 85-112.
16. Tyrer P., Cooper S. and Bassett, P. Increase in the prevalence of health anxiety in medical clinics: Possible cyberchondria. International Journal of Social Psychiatry, 2019, Vol. 65, Issue 7-8, doi.org/10.1177/0020764019866231.
17. Norbye, A. D., Abelsen, B., Førde, O.H. and Ringberg, U. Health anxiety is an important driver of healthcare use. BMC Health Services Research, 2022, Vol. 22, Article number: 138.
18. Rief, W., Buhlmann, U., Wilhelm, S., Borkenhagen, A., and Brähler, A. The prevalence of body dysmorphic disorder: a population-based survey. Psychol Med. 2006, Jun;36(6):877-85. doi: 10.1017/S0033291706007264.
19. Bjornsson, A.S., Didie, R.D. and Phillips K.A. Body dysmorphic disorder. Dialogues Clin Neurosci. 2010 Jun; 12(2): 221–232. doi: 10.31887/DCNS.2010.12.2/abjornsson
20. Fenske, J.N., and Petersen, K. Obsessive-Compulsive Disorder: Diagnosis and Management. Am Fam Physician, 2015, 92, 896-903.
21. Roper, G. and Rachman, S. Obsessional-compulsive checking: experimental replication and development. Behav Res Ther, 1976, 14, 25-32.
22. Sahoo, P., Sethy, R. R. and Ram, D. Functional Impairment and Quality of Life in Patients with Obsessive Compulsive Disorder. Indian J Psychol Med, 2017, 39, 760-765.
23. Markarian, Y., Larson, M. J., Aldea, M. A., Baldwin, S. A., Good, D., Berkeljon, A., Murphy, T. K., Storch, E. A. & Mckay, D. Multiple pathways to functional impairment in obsessive-compulsive disorder. Clin Psychol Rev, 2010, 30, 78-88.
24. McCarty, R., Guzick, A., Swan, L. & McNamara, J. Stigma and recognition of different types of symptoms in OCD. Journal of Obsessive-Compulsive and Related Disorders, 2016, 12, 64-70.
25. Krebs, G. and Heyman, I. Obsessive-compulsive disorder in children and adolescents. Archives of Disease in Childhood, 2015, 100, 495.
26. Brakoulias, V., Starcevic, V., Belloch, A., Brown, C., Ferrao, Y. A., Fontanelle, L. F., Lochner, C., Marazziti, D., Matsunaga, H., Miguel, E. C., Reddy, Y. C. J., Do Rosario, M. C., Shavitt, R. G., Shyam Sundar, A., Stein, D. J., Torres, A. R. and Viswasam, K. Comorbidity, age of onset and suicidality in obsessive-compulsive disorder (OCD): An international collaboration. Compr Psychiatry, 2017, 76, 79-86.
27. Sharma, E., Sharma, L. P., Balachander, S., Lin, B., Manohar, H., Khanna, P., Lu, C., Garg, K., Thomas, T. L., Au, A. C. L., Selles, R. R., Hojgaard, D., Skarphedinsson, G. and Stewart, S. E. Comorbidities in Obsessive-Compulsive Disorder Across the Lifespan: A Systematic Review and Meta-Analysis. Front Psychiatry, 2021, 12, 703701.
28. Eisen, J. L., Sibrava, N. J., Boisseau, C. L., Mancbo, M. C., Stout, R. L., Pinto, A. & Rasmussen, S. A. Five-year course of obsessive-compulsive disorder: predictors of remission and relapse. J Clin Psychiatry, 2013, 74, 233-9.
29. Fineberg, N. A., Hengartner, M. P., Bergbaum, C., Gale, T., Rossler, W. and Angst, J. Remission of obsessive-compulsive disorders and syndromes; evidence from a prospective community cohort study over 30 years. Int J Psychiatry Clin Pract, 2013, 17, 179-87.