INVITED ARTICLE

MANAGEMENT OF PANIC DISORDER

K T Chee

ABSTRACT

Symptoms of panic attack can be found in both medical disease and mental disorder. At least 4 of 13 diagnostic symptoms need to be present to constitute an attack which onset is sudden and unpredictable. The duration of attack usually lasts minutes but sometimes longer. In panic disorder there is recurrent attacks of severe anxiety which are unprovoked and unexpected. Dominant symptoms vary from person to person. The syndrome is likely to be heterogeneous as the biological aetiology may be related to abnormalities in the function of a number of neurotransmitters ie serotonin, noradrenaline, gamabutyric acid, dopamine and cholecystokinin. As such different benzodiazepines and anti-depressants are efficacious in the treatment of the disorder. Medications should be titrated to prevent attacks and restore confidence. Maintenance therapy needs to be balanced with premature termination of treatment. Reassurance is important and there is a place for cognitive behavioural therapy, relaxation exercise and breathing control technique.

Keywords: *panic attack, panic disorder, diagnostic symptoms, aetiology, management.*

SINGAPORE MED J 1995; Vol 36: 664-665

INTRODUCTION

The symptoms which make up a panic attack have been described in various medical conditions eg hypoglycaemia, hyperthyroidism, pheochromocytoma, withdrawal of psychoactive substances such as alcohol and barbiturates or intoxication with stimulants such as caffeine and amphetamine, psychoses, depressive illness and other anxiety disorders. Some panic attacks may be situationally bound (cued) or predisposed. However, the diagnosis of the panic disorder as a syndrome entity depends on the "arbitrarily" defined cluster of symptoms and its duration. It goes without saying that any underlying physical diseases have to be excluded as being aetiological.

CLINICAL FEATURES AND CRITERIA

Panic disorder comes under anxiety disorders. According to the Diagnostic and Statistical Manual of Mental Health Disorders (DSM-IV)[1] panic attacks consist of discrete periods of intense fear or discomfort together with some onset symptoms which are unexpected and unprovoked. To qualify for the diagnosis of panic disorder (with or without agoraphobia) the criteria are:

- presence of at least 4 of 14 somatic/cognitive symptoms.
- having 4 or more attacks within 4 weeks.
- having one or more unexpected attacks followed by a period of at least one month of persistent fear of having another attack.

The list of diagnostic symptoms are as follows:

- shortness of breath (dyspnoea) or smothering sensations
- dizziness, unsteady feelings or faintness.
- palpitations or accelerated heart rate (tachycardia).
- trembling or shaking
- sweating
- choking
- nausea or abdominal distress
- depersonalisation or derealisation
- numbness or tingling sensations (paraesthesias)
- flushes (hot flashes) or chills
- chest pain or discomfort
- fear of dying
- fear of going crazy or of doing something uncontrolled.

Initial attacks which are sudden, unexpected, and unprovoked usually last few minutes and rarely hours. Later, the attacks may be associated with situations. In between there is anticipatory anxiety or fear of further sudden attacks.

The onset of panic disorder is in the late 20s but the diagnosis is often made after prolonged suffering. The course is variable and may last for years. The disorder is more frequent in females and is believed to have been predisposed by separation anxiety. Panic disorder is often associated with agoraphobia resulting in severe impairment of socio-occupational functioning. There is also a strong association between panic disorder and major depression, alcoholism, suicide, and cardiovascular disease causing significant morbidity and mortality.

In ICD-10 Classification of Mental and Behavioural Disorders,[2] panic disorder (episodic paroxysmal anxiety) is described as recurrent attacks of severe anxiety (panic) which are not restricted to any particular situation or set of circumstances and are unpredictable. Dominant symptoms vary from person to person but sudden onset of palpitations, chest pain, choking sensations, dizziness and feelings of unreality (depersonalisation of derealisation) are common. There is secondary fear of dying, going mad and losing control. The durations last minutes only, sometimes longer. Frequency of attacks and course are variable.

The panic attack itself is experienced as a crescendo of fear and autonomic symptoms which result in the hurried exit from the prevailing situations and subsequent avoidance. Frequent and unpredictable panic attacks produce fear of being alone or going into public places. A panic attack is often followed by a persistent fear of having another attack.

According to ICD-10, panic disorder should be the main diagnosis only in the absence of any of the phobias in F40 (Phobic Anxiety Disorders). Several severe attacks of autonomic anxiety should have occurred within a period of about one month:

a) in circumstances with no objective danger;
b) without being confined to known or predictable situations;

Department of General Psychiatry
Woodbridge Hospital/Institute of Mental Health
10 Buangkok Green
Singapore 539747

K T Chee, MRCPsych, FAMS
Senior Consultant & Head

and

c) with comparative freedom from anxiety symptoms between attacks (although anticipatory anxiety is common).

THEORIES

Stress model had been used to explain the aetiology of panic disorder but the interactions of environmental, behavioural and genetic factors are more likely. The biological aetiology of panic disorder may be related to abnormalities in the function of a variety of neurotransmitters including serotonin, noradrenaline, gama-aminobutyric acid, dopamine and cholecystokinin[3]. In other words panic disorder could be a biologically heterogeneous condition with subtypes. Major biological theories include:

1. Firing disorder of locus ceruleus resulting in overstimulation of sympathetic nervous system.
2. Gama-aminobutyric acid (GABA) or benzodiazepine-receptor deficiency.
3. Hypersensitivity to pCO_2.
4. Increased activity around the parahippocampal gyrus of the brain.

STAGES IN DEVELOPMENT/PROGRESS OF PANIC DISORDER

It has been said that by the time panic disorder is diagnosed the patient would have suffered symptoms for many years. Professor David Sheehan of USA (during a lecture talk) describes the following stages of panic disorder, how they progress and worsen when undiagnosed and untreated:

- Limited-symptom attacks ie fewer than 4 symptoms
- Panic attack
- Health fears
- Limited phobias
- Extensive phobias
- Depression

MANAGEMENT

As panic disorder develops and progresses in stages (from limited symptoms to severe disability) early and appropriate treatment cannot be overemphasised. The symptoms which strike unexpectedly and unprovoked, lasting a short duration and leaving a state of anticipatory anxiety, would result in an acute on chronic situation. The usual consequence is that the individual's confidence is scriously undermined. Medications on when necessary basis would not help as the attack comes and goes before the drug could take effect.

Apart from medications, the reassurance that the attack is common and that one is not going to die or going out of one's mind is important. Effort must be made to explore in detail for possible hidden or developed triggering factors even though the attack is supposedly unexpected and unprovoked. Cognitive behavioural psychotherapy, relaxation exercise and breathing control technique can be taught.

MEDICATIONS

Treatment depends on the stage at which the disorder present. The benzodiazepines (eg. alprazolam, clonazepam, diazepam and lorazepam) and the tricyclic anti-depressants (eg imipramine, clomipramine, despiramine) are the mainstay in drug treatment. They may be used separately or in combination. The dosage and frequency prescribed should aim at maximal if not complete relief of symptoms with minimal side effects. Titration may take weeks and the patient should be prepared for it. When fear or anxiety is removed and confidence is fully restored, then dosage and frequency of medications can be gradually reduced without risking the return of the symptoms. Each time the symptoms are exacerbated and the patient's confidence is threatened the dosage and frequency should be increased to the optimal level again. Close monitoring and feedback from the patient are important. Reduction of medications should be avoided when stressful life events are anticipated.

Patients should be informed about the regime and the rationale behind the treatment. They should also be advised to be patient about the need for careful titration of medication before relief of symptoms is achieved. Maintenance therapy may have to continue indefinitely and premature termination of treatment is not advisable. For those whose treatment is terminated it sometimes helps to have standby medicine which gives reassurances.

Different patients may respond to different benzodiazepines and different classes of antidepressants including the MAOIs (moclobemide and phenelzine) and SSRIs (fluoxetine, paroxetine, fluvoxamine). One should be familiar with a few, using them well and keep other options open.

In recent years alprazolam has been promoted as the benzodiazepine for treatment of panic disorder. The dosage recommended is up to 6mg a day in divided doses. However, the local experience is not more than 4mg a day. As with all users of benzodiazepines one ought to be wary of the potential for abuse and dependence in the addictive sense. On the other hand, prolonged maintenance use to sustain well being and functioning could be justified as medical dependence.

From personal experience, in the absence of contraindication, the combination of diazepam, propranolol and imipramine has been found to give good result for both panic disorder and agoraphobia. Diazepam from 2mg bid to 5mg tid and occasionally even 10mg tid, propranolol 10mg bid to 20mg tid and imipramine 25-50mg on or 25mg om and 50mg on may be prescribed.

References

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