

# Update on the management of post-traumatic stress disorder

## SUMMARY

Post-traumatic stress disorder occurs in people exposed to life-threatening trauma. GPs may be seeing more patients with post-traumatic stress disorder as military personnel return from overseas deployments.

The condition can present in various ways. To reduce the likelihood of missed or delayed diagnosis GPs can screen at-risk populations.

A comprehensive assessment is recommended. Specialist referral may be required, particularly if there are other mental health problems.

Trauma-focused psychological therapies should be offered as the first line of treatment for post-traumatic stress disorder. Usually 8–12 sessions are needed for a therapeutic effect.

If drug treatment is needed, selective serotonin reuptake inhibitors are the first line. Other drugs used in post-traumatic stress disorder include antipsychotics, anticonvulsants and prazosin.

## Introduction

Post-traumatic stress disorder is characterised by the development of psychological and behavioural symptoms. The trauma involves exposure to death, serious injury or sexual violence. Examples of potentially traumatic events include natural disasters such as bushfires, severe accidents and assaults, as well as occupational exposures in groups such as the military and law enforcement. Post-traumatic stress disorder can be associated with high rates of comorbid depression and substance abuse. There can be significant concern about compensation, and major, long-lasting effects on families.<sup>1,2</sup>

The estimated 12-month prevalence rate for post-traumatic stress disorder in the Australian community is 5.2%, compared with 8.3% in the Australian Defence Force.<sup>3</sup> Australian GPs may encounter a new cohort of currently serving military personnel and contemporary veterans following deployments to Iraq and Afghanistan.

## Clinical presentations

The typical symptoms of post-traumatic stress disorder include distressing memories of the trauma, disturbed dreams and flashbacks. The person tries to avoid things that are reminders of the trauma. They may present in a variety of ways. Some may present with the usual symptoms and have a willingness to engage in treatment. Others can present dramatically, with rapid decompensation that may include alcohol abuse, uncharacteristic anger, aggression

or violence, and sometimes deliberate self-harm. In a military setting, this may be characterised by disciplinary problems or unexpected resignation post-deployment. More subtle and gradual presentations may include increasing work problems, impaired work performance, changes in personality, social isolation and presentation with non-specific somatic complaints, in particular, insomnia.<sup>4</sup> People may also present seeking assistance with a compensation claim.

Australian Vietnam War veterans with post-traumatic stress disorder are now aged in their 60s. The nature of their post-traumatic stress disorder is changing with cognitive and general health decline, becoming attenuated and generalised. This leads to presentations that do not always have classical or severe intrusive symptoms. Avoidance behaviour becomes more entrenched and habitual to the extent that it may come to be considered 'normal'. Anxiety symptoms generalise to situations that are not directly connected to the traumatic memory and may lead to intolerance of all stress.

## Assessment

The presence of post-traumatic stress disorder is often missed. When patients present with repeated non-specific health problems the GP should consider asking about exposure to traumatic events. A screening tool can be helpful (Box 1).<sup>5</sup> This brief screen can be supplemented by a more detailed symptom review such as the Posttraumatic Stress Disorder Checklist.<sup>6</sup>

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**Box 1 Primary care post-traumatic stress disorder screen (PC-PTSD)<sup>5</sup>**

'In your life, have you ever had any experience that was so frightening, horrible or upsetting that, in the past month, you:

- have had nightmares about it or thought about it when you did not want to?
- tried hard not to think about it or went out of your way to avoid situations that reminded you of it?
- were constantly on guard, watchful, or easily startled?
- felt numb or detached from others, activities or your surroundings?'

If the patient answers two or more with 'yes', a diagnosis of post-traumatic stress disorder is probable.

A formal diagnosis requires a comprehensive mental health assessment and preferably a disorder-focused interview such as the Clinician Administered Post-traumatic stress disorder Scale to improve diagnostic reliability.<sup>7</sup> Post-traumatic stress disorder symptoms that persist or cause significant distress or disability require specialist referral. Ideally there should be a multidisciplinary assessment including psychiatrists, psychologists and, where relevant, nursing, social work and occupational therapy input.

When post-traumatic stress disorder becomes chronic, it is often complicated by other comorbid conditions, particularly depression, substance abuse and other anxiety disorders. Chronic pain can also be a comorbid problem when there has been both physical and psychological trauma. These comorbid conditions should also be screened for and assessed when post-traumatic stress disorder is suspected. Other related problems warranting specific assessment include suicidal ideation, anger and gambling.

**Diagnostic criteria**

The diagnostic criteria for post-traumatic stress disorder in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)<sup>8</sup> (Box 2) differ

from the previous edition. They have a more explicit definition of what comprises a traumatic event. Post-traumatic stress disorder is no longer included in the chapter on anxiety disorders, but is now in a new chapter, 'Trauma and stressor-related disorders'.

**Treatment**

Guidelines published by the Australian Centre for Post-traumatic Mental Health recommend that drugs for post-traumatic stress disorder should not be used as routine first-line treatment in preference to trauma-focused psychotherapy.<sup>9</sup> The management of post-traumatic stress disorder needs to consider any comorbidities. These can influence the approach to therapy.

**Psychological therapies**

Trauma-focused psychological treatments are the most effective evidence-based interventions for post-traumatic stress disorder.<sup>9</sup> These include trauma-focused cognitive behavioural therapy that can involve prolonged exposure and cognitive processing therapy, or eye movement desensitisation and reprocessing. Second-line psychological treatments that are not trauma-focused, but can be helpful, include stress inoculation training.

Typically, 8-12 trauma-focused therapy sessions of 90 minutes duration are required to produce the best therapeutic effects. This treatment is frequently demanding and logistically difficult, so there is considerable interest in recent work on an intensive two-week version.<sup>10</sup>

As GPs will usually have the central coordinating and referral role, it is important for them to be aware that their patient is receiving evidence-based treatment. Long-term supportive counselling is often appreciated by patients, however this approach is unlikely to have a positive impact.

The trauma-focused therapies will, by their nature, involve increasing the patient's level of anxiety and

**Box 2 DSM-5 criteria for post-traumatic stress disorder<sup>8</sup>**

The following diagnostic criteria apply to adults, adolescents, and children older than six years:

- exposure to actual or threatened death, serious injury, or sexual violence
- presence of one (or more) intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred
- persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred
- negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred
- marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred
- duration of the disturbance is more than one month
- the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning
- the disturbance is not attributable to the physiological effects of a substance (e.g. drug, alcohol) or another medical condition

Adapted from DSM-5 criteria for PTSD<sup>8</sup>

distress. This occurs in a safe and contained manner, the patient is taught strategies to manage this arousal, and the levels of distress drop to manageable levels by the end of the session. It is vital that avoidance mechanisms and behaviours that are core symptoms of post-traumatic stress disorder are made overt and explicitly addressed in the therapy.

### **Drug treatment**

Drug therapy may be used when<sup>9</sup>:

- patients are unwilling or not in a position to engage in psychotherapy
- patients have a serious comorbid condition or associated symptoms, for example severe depression
- patients' circumstances are not sufficiently stable to commence trauma-focused psychotherapy, for example high risk of suicide or harm to others
- the severity of patient distress cannot be managed by psychological means alone
- there has been an insufficient response to psychotherapy alone
- there is a past history of a positive response to medication.

When drugs are used, the patient's mental state needs to be reviewed regularly with a view to starting psychotherapy when appropriate.

### **Antidepressants**

Selective serotonin reuptake inhibitors are the first choice of drug. This advice is based on an extensive review of the evidence for the Australian guidelines (2013),<sup>9</sup> and on other meta-analyses.<sup>11</sup> The Australian guidelines found insufficient evidence to warrant recommending one selective serotonin reuptake inhibitor over another.

With respect to dosing, patients with post-traumatic stress disorder may be very aware of their somatic reactions, such as nausea or headache. It is therefore important to 'start low, go slow, aim high' to minimise initial adverse effects and to achieve doses that are more likely to be effective.<sup>12</sup> When symptoms have failed to respond to a particular drug, consideration should be given to increasing the dose within approved limits.<sup>9</sup> The Australian guidelines recommend that patients with post-traumatic stress disorder who have responded to drug treatment should continue on the dose that achieved remission for at least 12 months before gradual withdrawal is attempted.<sup>9</sup>

Patients who respond to antidepressant drugs usually show some improvement within the first two weeks of treatment with an adequate dose. If there is no response, then consultation with a psychiatrist is

advised and consideration should be given to changing to another class of antidepressant. Specifically, if a patient has not responded to an adequate trial of a selective serotonin reuptake inhibitor, then either another selective serotonin reuptake inhibitor or a serotonin noradrenaline reuptake inhibitor should be tried, after a suitable withdrawal and washout period. If the patient still does not respond, then switching to a different class of antidepressant is advised. Further trials of either mirtazapine, moclobemide, a tricyclic antidepressant or an irreversible monoamine inhibitor could be considered, if required.<sup>13</sup>

### **Benzodiazepines**

In the absence of any evidence of benefit, the Australian guidelines do not mention benzodiazepines specifically. They recommend that 'appropriate sleep medication' should only be used cautiously and then only in the short term (for less than one month continuously) in those patients who have not responded to non-drug interventions.<sup>9</sup> Both the US<sup>13</sup> and Australian<sup>9</sup> guidelines highlight the common problems of misuse, tolerance and dependency in patients taking benzodiazepines.

### **Antipsychotics**

The use of antipsychotic drugs for post-traumatic stress disorder is not well supported by research evidence. When there is an inadequate symptom response to other drugs, the Australian guidelines recommend a specialist opinion to determine the appropriateness of using olanzapine or risperidone as augmentation strategies.<sup>10</sup> Anecdotal experience suggests that this class of medication can, in individuals with more severe and complex post-traumatic stress disorder, improve nightmares, insomnia, mood, anxiety, anger and dissociation. Despite the lack of evidence, many clinicians prefer quetiapine to olanzapine and risperidone as an augmentation strategy, as it is less likely to cause metabolic or extrapyramidal adverse effects.

If atypical antipsychotics are used, metabolic monitoring should be undertaken and documented. This should include regular monitoring of blood pressure, waist measurement, body weight, lipids and fasting glucose.

### **Anticonvulsants**

The Australian guidelines do not make specific recommendations about the use of anticonvulsants for post-traumatic stress disorder. The US guidelines advise against their use, especially valproate, topiramate and tiagabine, as monotherapy. They also concluded that there was insufficient evidence to recommend an anticonvulsant as an adjunctive treatment.

The likely clinical scenario that leads to consideration of using an anticonvulsant in the treatment of post-

traumatic stress disorder is when the presentation is characterised by treatment resistance, severity and complexity. Certain presenting symptoms such as anger, impulsivity and dissociation can be targeted with anticonvulsants, but the same precautions regarding risk and benefit as outlined for benzodiazepines are recommended.

### Prazosin

Prazosin, an alpha<sub>1</sub> adrenoreceptor antagonist, has yielded mixed results in the treatment for post-traumatic stress disorder. However, it has shown consistent efficacy in improving sleep and reducing nightmares. As prazosin can cross the blood-brain barrier it may dampen the noradrenergic activity thought to contribute to nightmares. Both the US and the Australian guidelines<sup>9</sup> recommend prazosin as an adjunctive treatment. A subsequent study confirmed its effectiveness with sleep symptoms and found prazosin was effective for overall post-traumatic stress disorder symptoms in a study over 15 weeks.<sup>14</sup> Mean achieved total daily doses of 19.6 mg for males and 8.7 mg for females were well tolerated. Postural hypotension, headache, dry mouth and fatigue are among the reported adverse effects.

There are no evidence-based recommendations for how long prazosin should be used in the treatment of post-traumatic stress disorder. We recommend that when used, its efficacy and tolerability be regularly reviewed, and when there is clear clinical evidence for ongoing benefit it should be continued.

### Referral and patient support

Consultation with a psychiatrist is recommended when:

- diagnostic clarification is required
- comorbid conditions are present
- post-traumatic stress disorder is severe or complex with concern about patient safety
- there is treatment resistance requiring consideration of augmentation strategies, polypharmacy or the use of irreversible monoamine inhibitors.

Support and self-help groups are available for post-traumatic stress disorder sufferers who are veterans, ranging from traditional ex-service organisations such as the Returned and Services League (RSL) through to self-help organisations such as 'Soldier On'. Veterans and their families also have free access to the Veterans and Veterans Families Counselling Service. Other groups of trauma victims are less well served. The network of Centres Against Sexual Assault provide counselling services for survivors of sexual trauma. Following natural disasters such as the Black Saturday bushfires, communities often draw together to provide important social and practical support for each other. It is important for GPs to be aware of these services and opportunities and the benefits they afford patients with post-traumatic stress disorder.

There is an increasing number of online education and resource sites for GPs that can assist in their skills development in this area (see Box 3).

### Conclusion

Post-traumatic stress disorder is a common mental health disorder that can cause severe distress and disability. It is frequently underdiagnosed so screening for it could improve detection. There is a growing body of clinical research that has led to treatment guidelines that consistently recommend trauma-focused psychological therapies as the most effective first-line treatment. When pharmacotherapy is required selective serotonin reuptake inhibitors should be used first. ◀

*Duncan Wallace is a member of the Australian Centre for Posttraumatic Mental Health Multidisciplinary Panel that developed the Australian Guidelines for the Treatment of Acute Stress Disorder and Posttraumatic Stress Disorder (2013).*

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### SELF-TEST QUESTIONS

True or false?

1. Prazosin may improve the sleep of patients with post-traumatic stress disorder.
2. Tricyclic antidepressants are the drugs of first choice for treating post-traumatic stress disorder.

Answers on page 71

### Box 3 Online education and resources for GPs

Royal Australian College of General Practitioners  
Six-hour GPEarning activity module: Managing disaster and trauma-related mental health problems. 2014.  
[www.racgp.org.au/education/courses/activitylist/activity/?id=131&q=keywords%3dtrauma](http://www.racgp.org.au/education/courses/activitylist/activity/?id=131&q=keywords%3dtrauma)

Department of Veterans' Affairs  
At Ease Portal. Mental Health Advice Book. Part 2, Chapter 6. Posttraumatic stress disorder. 2012.  
<http://at-ease.dva.gov.au/professionals/mental-health-advice-book/part-2-advice-for-general-practitioners/6-posttraumatic-stress-disorder-gp-summary/>

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## Book review

### Martindale: The Complete Drug Reference. 38th ed.

London: Pharmaceutical Press; 2014  
4109 pages

Also available online [www.medicinescomplete.com](http://www.medicinescomplete.com)

This book is presented as a hefty two volume set housed in a simple outer case. My first impression of this edition is that it is extremely heavy (about 6 kg) and has a large footprint, so make sure it's kept on a low shelf!

There have been significant changes in the presentation of information since the 37th edition. Volume A consists of monographs covering a wide range of drug classes as well as sections on pesticides and repellents, radiopharmaceuticals and sex hormones and their modulators. The section 'Vaccines, immunoglobulins and antisera' contains a wealth of information on the effects of vaccines on a patient's organs. Volume B contains a list of selected preparations, manufacturers, pharmaceutical terms and indexes.

The drug monographs are laid out in an easy-to-read manner and have been restructured. 'Uses and administration' appears immediately after the physicochemical description of the substance. In contrast to other references such as Micromedex and

MIMS, the pharmacokinetic information for products appears at the end of the monograph, after the interactions and adverse effects.

The information is current and well researched, although there were some gaps in entries, especially with respect to complementary and alternative therapies. The location of these products was also confusing, with some like milk thistle listed under 'Chelators, antidotes and antagonists' and others like garlic included in 'Miscellaneous drugs and other substances'.

The most obvious change to the drug monographs is the deletion of the chemical structure diagrams in the print version. This has allowed for a restructure of the monographs using larger font size to increase readability. Unfortunately, this deletion has removed the ability to quickly compare the structures of substances. This was useful when trying to ascertain whether structurally based cross-reactivity between drugs may exist. The disclaimer that this information is available in the electronic form of Martindale is provided in the preface to this edition and begs the question 'Is the print version still relevant?'

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